

**TETRA TECH, INC.**

17770 Cartwright Road, Suite 500
Irvine, CA 92614
Telephone (949) 253-2958
FAX (949) 250-6776

April 29, 2004

Lockheed Martin Corporation
West Coast Project Office
2550 N. Hollywood Way, 3rd Floor
Burbank, California 91505

Attention: Mr. Robert Simpson
Project Supervisor

Subject: February 2004 Data Report
Water Supply Contingency Plan
Production Well Sampling Program
Crafton-Redlands Plume Project

Dear Mr. Simpson:

This report presents a summary of results of the Water Supply Contingency Plan (WSCP) production well sampling for wells sampled in the month of February 2004.

In accordance with the WSCP sampling decision matrices for TCE and perchlorate (Figures 3 and 4, respectively), wells and sample points are sampled monthly, alternate months or semiannually depending on the sample concentrations and concentration trends in the wells. In general, wells not sampled in February (shown in Table 1) were not scheduled for sampling or were not in service during the sampling event.

RESULTS

Summaries of the analytical results for the February 2004 WSCP sampling event for TCE and perchlorate are shown on Figures 1 and 2, respectively, and presented in Table 1. Available groundwater elevation data are provided in Table 2. The sample number identifiers are provided in Table 3. The water sampling field forms are provided in Attachment A. Chain-of-custody, laboratory data sheets, and Level III laboratory quality assurance/quality control (QA/QC) documentation are provided in Attachment B.

Trichloroethene

No groundwater sample collected in February met or exceeded 2/5th the MCL for TCE (i.e., greater than or equal to 2.0 µg/L).

In accordance with the WSCP decision matrix, wells at or above 2.0 µg/L for TCE are sampled once a month, if active and not in treatment. Gage 66-1 is currently scheduled for sampling once a month for TCE, but was not active during the February sampling event.

Perchlorate

In the February WSCP sampling, perchlorate was detected at or above the new AL (i.e., greater than or equal to 6.0 µg/L) in five wells including the following:

Gage 26-1 (6.1 µg/L, 6.5 µg/L duplicate)	Raub #5 (7.7 µg/L)
RHWC #2 (6.2 µg/L)	RHWC #18 (6.4 µg/L)
New York Street Well (14 µg/L)	

Under the WSCP decision matrix, analytical results of the samples collected will determine the sampling frequency for each water supply well.


Other Perchlorate Results

Additional wells outside the area of the Redlands plume were sampled for perchlorate during the February WSCP sampling. Perchlorate was detected in one of these wells at or above the AL, VA Hospital Well (12 µg/L).

CLOSING

Should you have any questions or comments, please do not hesitate to call.

Sincerely,
TETRA TECH, INC.


Roy J. Marroquin,
Project Manager


James C. Norman, R.G., CHg.,
Program Director

Attachments:

Table 1: February 2004 Data Results
Table 2: Summary of February 2004 Water Level Measurements
Table 3: February 2004 Sample Identifications
Figure 1: TCE Data Results February 2004
Figure 2: Perchlorate Data Results February 2004
Figure 3: TCE Sampling Decision Matrix
Figure 4: Perchlorate Sampling Decision Matrix

TABLES

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
FEBRUARY 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Loma Linda				
3106	Mountain View #3 ^c	NS	NS	NS
3171	Mountain View #4 ^c	NS	NS	NS
3175	Mountain View #5 ^b	2/3/2004	ND (4.0)	ND (0.5)
693	Richardson #1 ^b	NS	NS	NS
707	Richardson #3 ^c	NS	NS	NS
3132	Richardson #4 ^c	NS	NS	NS
City of Loma Linda Water System Sampling Points				
2967	Mountain View Blend - Lawton ^a	2/2/2004	ND (4.0)	ND (0.5)
2968	Richardson Blend ^a	2/2/2004	ND (4.0)	ND (0.5)
Mountain View Power				
554	SCE #2 (AUX) ^c	NS	NS	NS
Loma Linda University				
267	LL Univ Anderson #2 ^b	NS	NS	NR
717	LL Univ Anderson #3 ^b	2/2/2004	4.1	NR
City of Riverside (Gage System)				
252	Gage #26-1 ^{bd}	2/2/2004	6.1	1.6
252	Gage #26-1 ^{bd} (Duplicate)	2/2/2004	6.5	1.6
258	Gage #27-1 ^{bd}	NS	NS	NS
259	Gage 27-2 ^b	NS	NS	NS
260	Gage 29-1 ^b	NS	NS	NS
219	Gage 29-2 ^{bde}	NS	NS	NS
220	Gage 29-3 ^{bde}	NS	NS	NS
218	Gage 30-1 ^c	NS	NS	NS
214	Gage 31-1 ^b	NS	NS	NS
215	Gage 46-1 ^b	NS	NS	NS
253	Gage 51-1 ^{bde}	NS	NS	NS
216	Gage 56-1 ^c	NS	NS	NS
257	Gage 66-1 ^a	NS	NS	NS
644	Gage 92-1 ^{bde}	NS	NS	NS
641	Gage 92-2 ^c	NS	NS	NS
642	Gage 92-3 ^c	NS	NS	NS
3091	Gage 98-1 ^c	NS	NS	NS
City of Riverside (Waterman System)				
273	Hunt #6 ^b	NS	NS	NR
271	Hunt #10 ^b	NS	NS	NR
272	Hunt #11 ^b	NS	NS	NR
285	Garner #1 ^b	NS	NS	NR
286	Garner #2 ^b	NS	NS	NR
284	Garner #5 ^b	2/2/2004	4.8	NR
1908	Garner #6 ^b	2/2/2004	ND (4.0)	NR
2576	Garner #7 ^b	NS	NS	NR
254	Raub #2 ^b	NS	NS	NR
224	Raub #3 ^b	NS	NS	NR
255	Raub #4 ^b	NS	NS	NR
222	Raub #5 ^b	2/2/2004	7.7	NR
666	Raub #6 ^b	2/2/2004	ND (4.0)	NR
665	Raub #8 ^b	NS	NS	NR
202	Scheuer ^b	NS	NS	NR
282	Stiles ^b	NS	NS	NR
249	Warren #1 ^b	NS	NS	NR
247	Warren #4 ^b	NS	NS	NR

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
FEBRUARY 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Riverside Water System Sampling Points				
2946	Iowa Booster (Waterman) ^a	2/3/2004	ND (4 0)	ND (0 5)
2947	Gage Delivery (Gage) ^a	2/3/2004	ND (4 0)	ND (0 5)
2948	7th & Chicago (Reservoir) ^a	2/3/2004	ND (4 0)	ND (0 5)
3018	Gage Arlington ^a	2/3/2004	4 9	NR
3018	Gage Arlington ^a (Duplicate)	2/3/2004	4 7	NR
City of Redlands				
542	COR Church St ^b	NS	NS	NR
29	COR Orange St ^c	NS	NS	NR
74	COR Rees ^b	NS	NS	NS
1029	COR Mission ^b	NS	NS	NR
65	COR #31A ^b	NS	NS	NR
265	COR #34 ^b	NS	NS	NR
71	COR #35 ^b	NS	NS	NR
75	COR #37 ^b	NS	NS	NR
2673	COR #38 ^c	NS	NS	NR
Riverside Highlands Water Company				
1354	RHWC #2 ^b	2/2/2004	6 2	NR
1361	RHWC #5 ^b	2/2/2004	ND (4 0)	NR
383	RHWC #18 ^b	2/2/2004	6 4	NR
Other Wells - Agricultural				
82	New York Street Well ^b	2/2/2004	14	NR
81	COR #41 ^b	NS	NS	NR
3174	VA Hospital Well ^b	2/2/2004	12	NR

Notes

ND(4) = Not detected at the specified limit

NR = Not Required Analysis

NS = Not Sampled

TCE = Trichloroethene

Perchlorate analyzed using EPA Method 314.0

TCE analyzed using EPA Method 502.2

a = Well/sample point sampled on monthly basis if active

b = Well sampled once every two months if active

c = Well sampled on Semiannual basis if active

d = TCE treatment is installed

e = Perchlorate treatment is installed

TABLE 2

**SUMMARY OF WATER LEVEL MEASUREMENTS
FEBRUARY 2004 SAMPLING EVENT**

Well Number	Well Name	Measure Date	Depth to Water	Measuring Point Elevation	Groundwater Elevation	Comments
City of Loma Linda						
3106	Mountain View #3	2/2/2004	163.0	1086.0	923.0	Pumping
3171	Mountain View #4	2/2/2004	254.0	1106.0	852.0	Pumping
3175	Mountain View #5	2/2/2004	160.0	1085.0	925.0	Pumping
693	Richardson #1	2/2/2004	180.0	1077.0	897.0	Pumping
707	Richardson #3	2/2/2004	223.0	1078.7	855.7	Pumping
3132	Richardson #4	2/2/2004	178.0	1074.0	896.0	Pumping
Mountain View Power						
554	SCE #2 (AUX)	NM	NM	1100.0	NM	NM
Loma Linda University						
267	LL Univ Anderson #2	NM	NM	1075.0	NM	NM
717	LL Univ Anderson #3	NM	NM	1070.0	NM	NM
City of Riverside (Gage System)						
252	Gage #26-1	2/3/2004	122.0	1045.3	923.3	Pumping
258	Gage #27-1	2/3/2004	98.2	1044.6	946.4	Static
259	Gage #27-2	2/3/2004	98.6	1044.6	946.0	Static
260	Gage #29-1	2/3/2004	96.7	1044.4	947.7	Static
219	Gage #29-2	2/3/2004	111.3	1046.3	935.0	Pumping
220	Gage #29-3	2/3/2004	126.1	1048.8	922.7	Pumping
218	Gage #30-1	2/3/2004	149.7	1054.2	904.5	Static
214	Gage #31-1	2/3/2004	105.1	1054.6	949.5	Static
215	Gage #46-1	2/3/2004	111.5	1065.5	954.0	Static
253	Gage #51-1	2/3/2004	108.4	1044.6	936.2	Static
216	Gage #56-1	2/3/2004	153.9	1065.5	911.6	Static
257	Gage #66-1	2/3/2004	108.8	1044.9	936.1	Static
644	Gage #92-1	2/3/2004	140.0	1047.8	907.8	Static
641	Gage #92-2	2/3/2004	188.8	1053.4	864.6	Pumping
642	Gage #92-3	2/3/2004	202.9	1058.8	855.9	Pumping
3091	Gage #98-1	2/3/2004	136.5	1058.8	922.3	Static
City of Riverside (Waterman System)						
273	Hunt #6	NM	NM	1015.5	NM	NM
271	Hunt #10	NM	NM	1017.0	NM	NM
272	Hunt #11	NM	NM	1015.7	NM	NM
City of Redlands						
542	COR Church St	2/2/2004	175.0	1344.8	NM	Static
29	COR Orange St	2/2/2004	104.0	1282.0	1178.0	Static
74	COR Rees	2/2/2004	278.0	1490.0	1212.0	Static
1029	COR Mission	2/2/2004	139.0	1130.0	NM	Static
65	COR #31A	2/2/2004	193.0	1319.0	1126.0	Static
265	COR #34	2/2/2004	135.0	1090.0	955.0	Static
71	COR #35	2/2/2004	235.0	1395.0	1160.0	Static
75	COR #37	2/2/2004	139.0	1435.0	1296.0	Static
2673	COR #38	2/2/2004	111.0	1220.0	NM	Static
82	New York Street Well	2/2/2004	214.0	1300.0	1086.0	Pumping
81	COR #41	2/2/2004	178.0	1312.0	1134.0	Static

Notes:

All measurements reported in feet below measuring point (ft-bmp)

Water level measurements for all City of Loma Linda, City of Riverside, and City of Redlands wells were obtained by purveyor personnel.

Elevations given in feet above mean sea level (ft-msl)

NM = Not measured

NA = Data not available

Static water levels were allowed to recover a minimum of 30 minutes to obtain a static water level measurement

TABLE 3

**WSCP PRODUCTION WELL SAMPLING PROGRAM
FEBRUARY 2004 SAMPLE IDENTIFICATIONS**

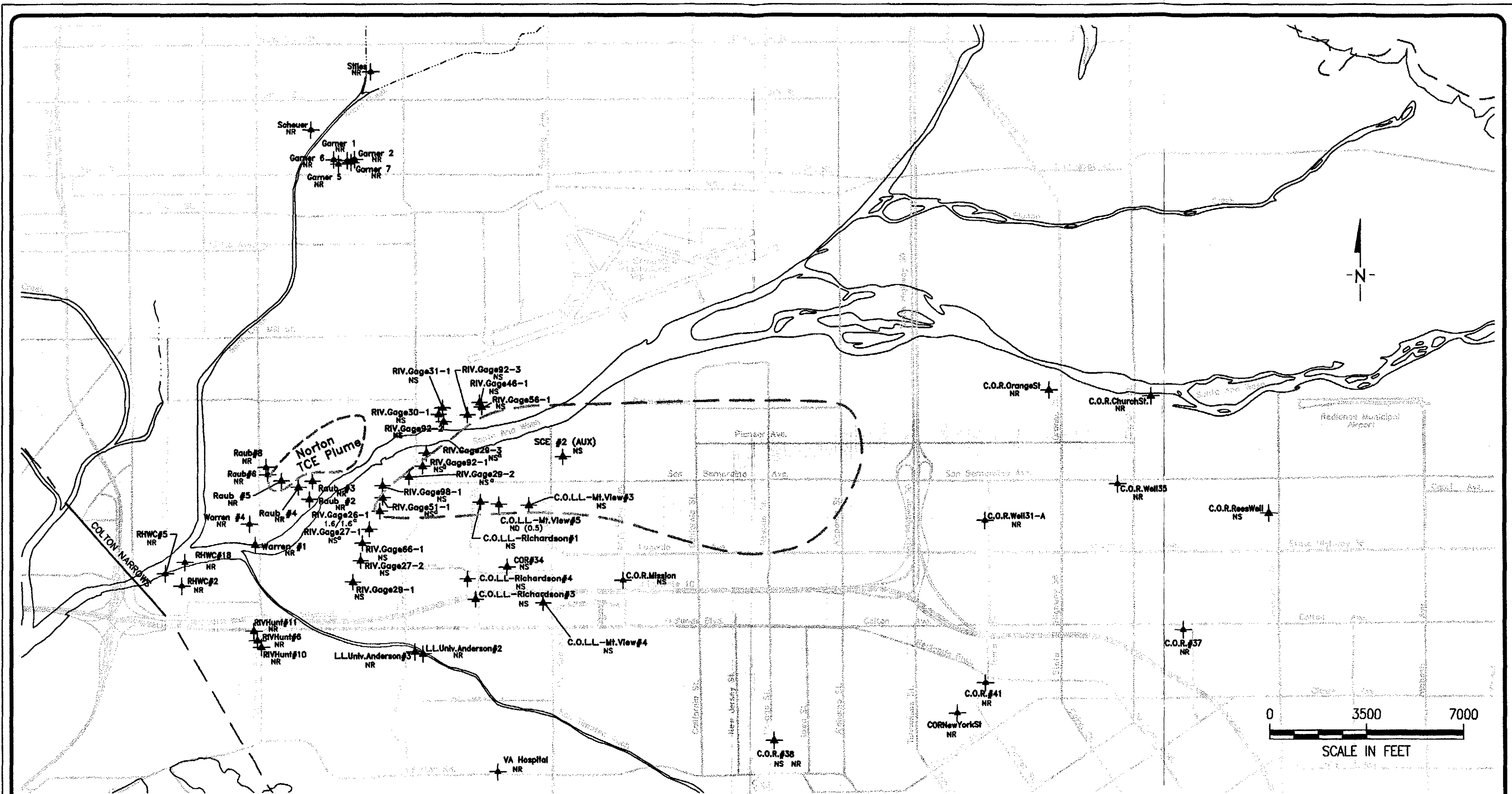
Well Number	Well Name	Sample Date	Sample Time	Sample Number Identification	Analyzed for Perchlorate	Analyzed for TCE
City of Loma Linda						
3106	Mountain View #3	NS	NS	NS	NS	NS
3171	Mountain View #4	NS	NS	NS	NS	NS
3175	Mountain View #5	2/3/2004	14:45	GW-2-20	Yes	Yes
693	Richardson #1	NS	NS	NS	NS	NS
707	Richardson #3	NS	NS	NS	NS	NS
3132	Richardson #4	NS	NS	NS	NS	NS
City of Loma Linda Water System Sampling Points						
2967	Mountain View Blend - Lawton	2/2/2004	7:20	GW-2-1	Yes	Yes
2968	Richardson Blend	2/2/2004	8:20	GW-2-2	Yes	Yes
Mountain View Power						
554	SCE #2 (AUX)	NS	NS	NS	NS	NS
Loma Linda University						
267	LL Univ Anderson #2	NS	NS	NS	NS	NR
717	LL Univ Anderson #3	2/2/2004	14:15	GW-2-12	Yes	NR
City of Riverside (Gage System)						
252	Gage #26-1	2/2/2004	13:25	GW-2-10	Yes	Yes
252	Gage #26-1 (Duplicate)	2/2/2004	13:30	GW-2-11	Yes	Yes
258	Gage #27-1	NS	NS	NS	NS	NS
259	Gage #27-2	NS	NS	NS	NS	NS
260	Gage #29-1	NS	NS	NS	NS	NS
219	Gage #29-2	NS	NS	NS	NS	NS
220	Gage #29-3	NS	NS	NS	NS	NS
218	Gage #30-1	NS	NS	NS	NS	NS
214	Gage #31-1	NS	NS	NS	NS	NS
215	Gage #46-1	NS	NS	NS	NS	NS
253	Gage #51-1	NS	NS	NS	NS	NS
216	Gage #56-1	NS	NS	NS	NS	NS
257	Gage #66-1	NS	NS	NS	NS	NS
644	Gage #92-1	NS	NS	NS	NS	NS
641	Gage #92-2	NS	NS	NS	NS	NS
642	Gage #92-3	NS	NS	NS	NS	NS
3091	Gage #98-1	NS	NS	NS	NS	NS
City of Riverside (Waterman System)						
273	Hunt #6	NS	NS	NS	NS	NR
271	Hunt #10	NS	NS	NS	NS	NR
272	Hunt #11	NS	NS	NS	NS	NR
285	Garner #1	NS	NS	NS	NS	NR
286	Garner #2	NS	NS	NS	NS	NR
284	Garner #5	2/2/2004	11:15	GW-2-6	Yes	NR
1908	Garner #6	2/2/2004	11:40	GW-2-7	Yes	NR
2576	Garner #7	NS	NS	NS	NS	NR
254	Raub #2	NS	NS	NS	NS	NR
224	Raub #3	NS	NS	NS	NS	NR
255	Raub #4	NS	NS	NS	NS	NR
222	Raub #5	2/2/2004	12:45	GW-2-9	Yes	NR
666	Raub #6	2/2/2004	12:30	GW-2-8	Yes	NR
665	Raub #8	NS	NS	NS	NS	NR
202	Scheuer	NS	NS	NS	NS	NR
282	Stiles	NS	NS	NS	NS	NR
249	Warren #1	NS	NS	NS	NS	NR
247	Warren #4	NS	NS	NS	NS	NR
City of Riverside Water System Sampling Points						
2946	Iowa Booster (Waterman)	2/3/2004	9:40	GW-2-19	Yes	Yes
2947	Gage Delivery (Gage)	2/3/2004	9:20	GW-2-18	Yes	Yes
2948	7th & Chicago (Reservoir)	2/3/2004	8:40	GW-2-17	Yes	Yes
3018	Gage Arlington	2/3/2004	7:15	GW-2-15	Yes	NR
3018	Gage Arlington (Duplicate)	2/3/2004	7:20	GW-2-16	Yes	NR

TABLE 3

**WSCP PRODUCTION WELL SAMPLING PROGRAM
FEBRUARY 2004 SAMPLE IDENTIFICATIONS**

Well Number	Well Name	Sample Date	Sample Time	Sample Number Identification	Analyzed for Perchlorate	Analyzed for TCE
City of Redlands						
542	COR Church St	NS	NS	NS	NS	NR
29	COR Orange St	NS	NS	NS	NS	NR
74	COR Rees	NS	NS	NS	NS	NS
1029	COR Mission	NS	NS	NS	NS	NR
65	COR #31A	NS	NS	NS	NS	NR
265	COR #34	NS	NS	NS	NS	NR
71	COR #35	NS	NS	NS	NS	NR
75	COR #37	NS	NS	NS	NS	NR
2673	COR #38	NS	NS	NS	NS	NR
Riverside Highlands						
1354	RHWC #2	2/2/2004	9:55	GW-2-3	Yes	NR
1361	RHWC #5	2/2/2004	10:27	GW-2-5	Yes	NR
383	RHWC #18	2/2/2004	10:10	GW-2-4	Yes	NR
Other Wells - Agricultural						
82	New York Street	2/2/2004	15:45	GW-2-14	Yes	NR
81	COR #41	NS	NS	NS	NS	NR
3174	VA Hospital Well	2/2/2004	14:55	GW-2-13	Yes	NR

FIGURES




EXPLANATION

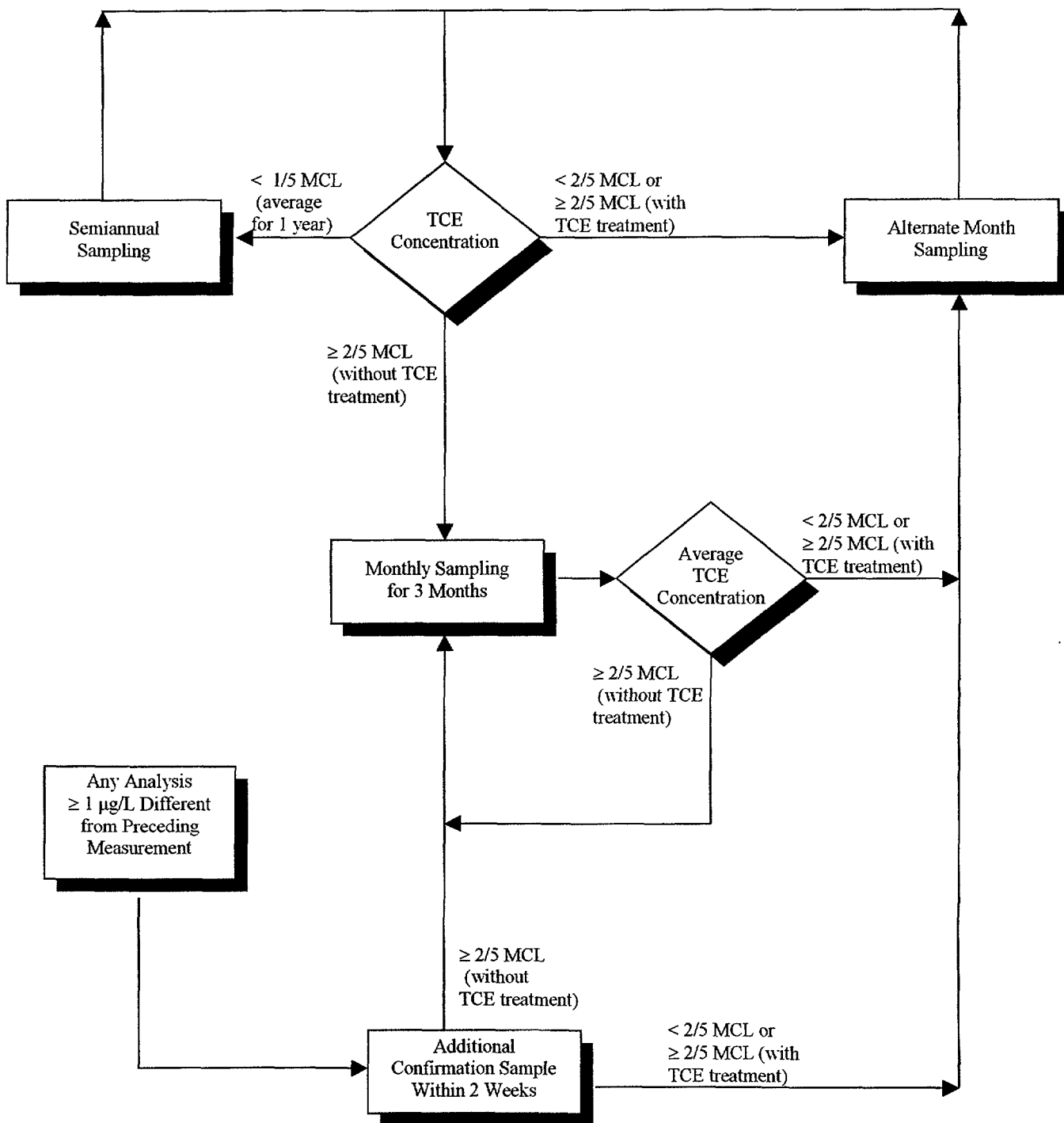
- ▲ Wells currently sampled under the existing WSCP Sampling Program
- 3.2 TCE results (µg/L)
 - a TCE treatment is installed
- ND(0.5) Not detected at Indicated Detection Limit
- NS Could not be sampled in February
- NR Not Required

Blending Point Sampling Data

ND (0.5)	C.O.L.L. Mountain View Blend - Lawton
ND (0.5)	C.O.L.L. Richardson Blend
ND (0.5)	Riv. Iowa Booster (Waterman)
ND (0.5)	Riv. Gage Delivery (Gage)
ND (0.5)	Riv. 7th + Chicago (Reservoir)
NR/NR	Gage Arlington

- TCE Plume footprint (5 µg/L) (February 2004 Interpretation)
- Approximate Bunker Hill Basin Boundary

TITLE: WSCP PRODUCTION WELL SAMPLING PROGRAM TCE DATA RESULTS FEBRUARY 2004		
LOCATION: LOCKHEED MARTIN CORPORATION REDLANDS, CALIFORNIA		
 Geotrans, Inc. <small>A TETRA TECH COMPANY</small>	CHECKED: Roy Marroquin	FIGURE: 1
	DRAFTED: Denver Martin	
	PROJ.: 0507.071.01	
DATE: 3/30/04		



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of TCE is less than 5 µg/L.

TCE Maximum Contaminant Level (MCL) = 5 µg/L (California Regulations, Title 22, Division 4,

DECISION MATRIX FOR SAMPLING PRODUCTION WELLS FOR TCE

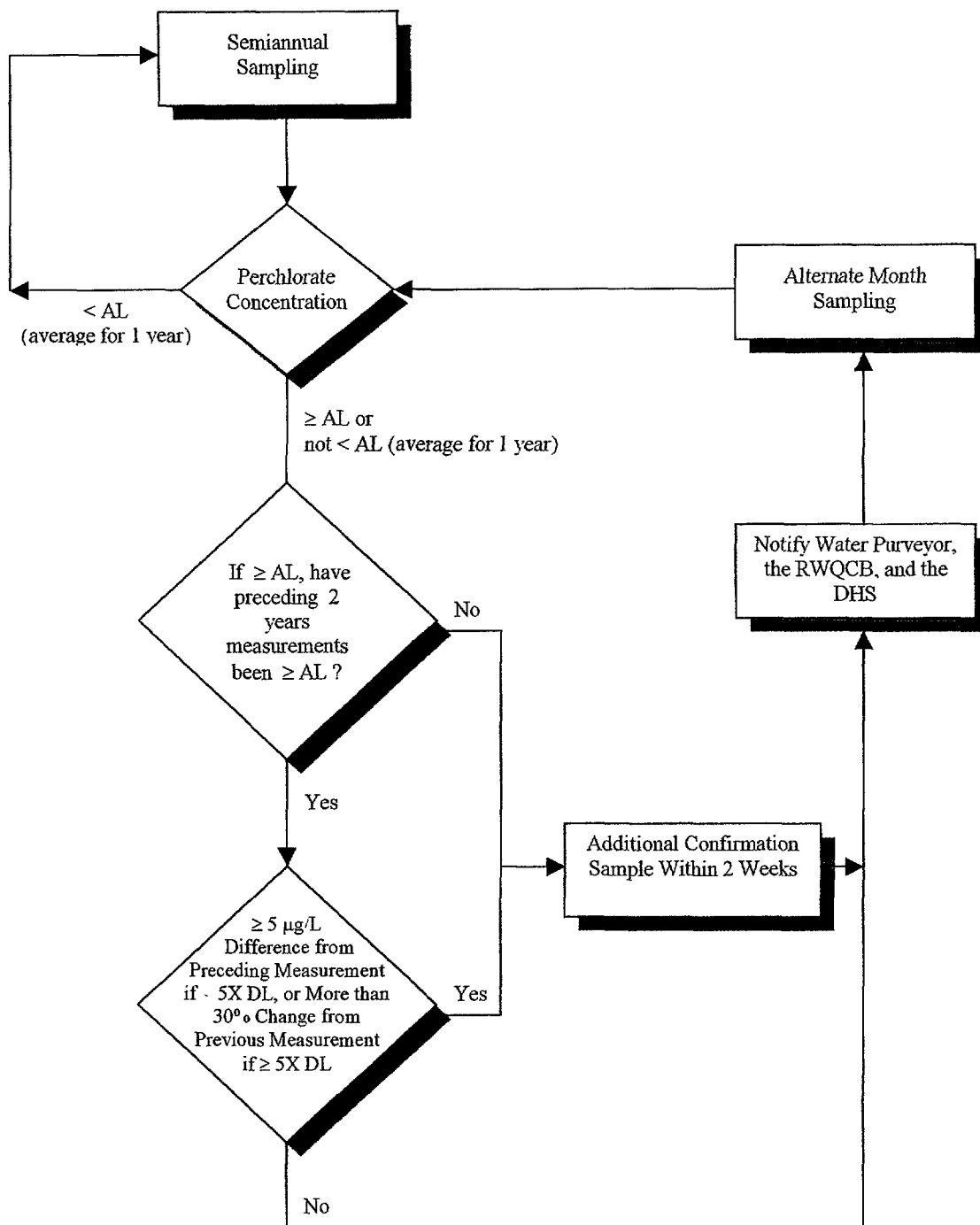
LOCKHEED MARTIN



GeoTrans, Inc.

DATE	04/22/0
PROJ.	0507.071.0

Figure 3



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of perchlorate is less than 6 µg/L.

Perchlorate Action Level (AL) = 6 µg/L (California Department of Health Services, March 2004)

DECISION MATRIX FOR SAMPLING PRODUCTION WELLS FOR PERCHLORATE

LOCKHEED MARTIN



GeoTrans, Inc.

DATE 04/22/0

PROJ. 0507.071.0

Figure 4

ATTACHMENT A
WATER SAMPLING FIELD FORMS

Available Upon Request

ATTACHMENT B

LABORATORY REPORT AND CHAIN-OF-CUSTODY

Available Upon Request

Lockheed Martin Corporation
Corporate Energy, Environment, Safety & Health
2550 North Hollywood Way, Suite 301
Burbank, CA 91505
Facsimile 818-847-0256

LOCKHEED MARTIN

Via Federal Express
BUR0404/092 WBS#48

April 29, 2004

Mr. Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

**RE: February 2004 Production Well Sampling Report,
Crafton-Redlands Plume Project
RWQCB Cleanup and Abatement Orders 94-37 and 97-58**

Dear Mr. Thibeault:

In accordance with the approved Water Supply Contingency Plan, enclosed is one copy of the February 2004 production well sampling report prepared by Tetra Tech for Lockheed Martin Corporation. This report presents results from samples collected at Bunker Hill Basin production wells in February 2004.

Should you have any questions or comments, please contact Bob Simpson at 818-847-0584.

Sincerely,



Thomas D. Blackman, R.G., C.HG.
Technical Project Manager

TB:bs

Attachment

cc: See Distribution List

Distribution List

(Abbreviated Report without Attachments "A" & "B", which are available upon request)

Department of Health Services (San Bernardino)
William Bryden, City of San Bernardino
Tom Crowley, San Bernardino Valley Water Conservation District
Douglas Headrick, City of Redlands
Don Hough, Riverside Highland Water Company
Ross Lewis, Gage Canal Company
Owen Lu, City of Riverside
Steve Mains, Western Municipal Water District
Dana Beaman, Loma Linda University
Phil Mook, Department of the Air Force, AFBCA
Kevin Mayer, US EPA (Region IX)
Cindy Norried, City of Riverside
Bob Reiter, San Bernardino Valley Municipal Water District
Steve Williams, Department of Health Services (San Diego)
Alain Sharp, Earth Technology Corporation
Greg Snyder, City of Loma Linda
Ron Hoover, Mountain View Power Company
Dieter Wirtzfeld, City of Riverside

2636708



TETRA TECH, INC.

17770 Cartwright Road, Suite 500
Irvine, CA 92614
Telephone (949) 253-2958
FAX (949) 250-6776

April 29, 2004

Lockheed Martin Corporation
West Coast Project Office
2550 N. Hollywood Way, 3rd Floor
Burbank, California 91505

Attention: Mr. Robert Simpson
Project Supervisor

Subject: March 2004 Data Report
Water Supply Contingency Plan
Production Well Sampling Program
Crafton-Redlands Plume Project

Dear Mr. Simpson:

This report presents a summary of results of the Water Supply Contingency Plan (WSCP) production well sampling for wells sampled in the month of March 2004.

In accordance with the WSCP sampling decision matrices for TCE and perchlorate (Figures 3 and 4, respectively), wells and sample points are sampled monthly, alternate months or semiannually depending on the sample concentrations and concentration trends in the wells. In general, wells not sampled in March (shown in Table 1) were not scheduled for sampling or were not in service during the sampling event.

RESULTS

Summaries of the analytical results for the March 2004 WSCP sampling event for TCE and perchlorate are shown on Figures 1 and 2, respectively, and presented in Table 1. Available groundwater elevation data are provided in Table 2. The sample number identifiers are provided in Table 3. The water sampling field forms are provided in Attachment A. Chain-of-custody, laboratory data sheets, and Level III laboratory quality assurance/quality control (QA/QC) documentation are provided in Attachment B.

Trichloroethene

One groundwater sample collected in March met or exceeded 2/5th the MCL for TCE (i.e., greater than or equal to 2.0 µg/L), Gage 29-3 (4.7 µg/L).

In accordance with the WSCP decision matrix, wells at or above 2.0 µg/L for TCE are sampled once a month, if active and not in treatment. Gage 66-1 is currently scheduled for sampling once a month for TCE. However, this well was not active during the March sampling event.

Perchlorate

In the March WSCP sampling, perchlorate was detected at or above the AL (i.e., greater than or equal to 6.0 µg/L) in a total of 9 wells within the Redlands plume including the following:

Richardson #1 (6.0 µg/L)

Gage 29-3 (22.0 µg/L)

Hunt # 6 (7.1 µg/L)

Hunt # 11 (7.5 µg/L)

Raub #2 (49 µg/L)

Raub #3 (22 µg/L)

Raub #4 (25 µg/L)

COR #35 (14 µg/L)

RHWC #18 (8.0 µg/L)

Under the WSCP decision matrix, analytical results of the samples collected will determine the sampling frequency for each water supply well.

Other Perchlorate Results

Additional wells outside the area of the Redlands plume were sampled for perchlorate during the March WSCP sampling. Perchlorate was detected in two of these wells at or above the AL:


Stiles (11.0 µg/L)

Garner #2 (6.6 µg/L)

CLOSING

Should you have any questions or comments, please do not hesitate to call.

Sincerely,
TETRA TECH, INC.


Roy J. Marroquin,
Project Manager


James C. Norman, R.G., CHg.,
Program Director

Attachments:

Table 1: March 2004 Data Results
Table 2: Summary of March 2004 Water Level Measurements
Table 3: March 2004 Sample Identifications
Figure 1: TCE Data Results March 2004
Figure 2: Perchlorate Data Results March 2004
Figure 3: TCE Sampling Decision Matrix
Figure 4: Perchlorate Sampling Decision Matrix

TABLES

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
MARCH 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Loma Linda				
3106	Mountain View #3 ^c	NS	NS	NS
3171	Mountain View #4 ^c	NS	NS	NS
3175	Mountain View #5 ^b	3/1/2004	ND (4.0)	ND (0.5)
693	Richardson #1 ^b	3/1/2004	6.0	ND (0.5)
707	Richardson #3 ^c	NS	NS	NS
3132	Richardson #4 ^c	NS	NS	NS
City of Loma Linda Water System Sampling Points				
2967	Mountain View Blend - Lawton ^a	3/1/2004	ND (4.0)	ND (0.5)
2968	Richardson Blend ^a	3/1/2004	ND (4.0)	ND (0.5)
Mountain View Power				
554	SCE #2 (AUX) ^c	NS	NS	NS
Loma Linda University				
267	LL Univ Anderson #2 ^b	3/1/2004	4.9	NR
717	LL Univ Anderson #3 ^b	NS	NS	NR
City of Riverside (Gage System)				
252	Gage #26-1 ^{bd}	NS	NS	NS
258	Gage #27-1 ^{bd}	NS	NS	NS
259	Gage 27-2 ^b	NS	NS	NS
260	Gage 29-1 ^b	NS	NS	NS
219	Gage 29-2 ^{bde}	NS	NS	NS
220	Gage 29-3 ^{bde}	3/1/2004	22	4.7
218	Gage 30-1 ^c	NS	NS	NS
214	Gage 31-1 ^b	NS	NS	NS
215	Gage 46-1 ^b	NS	NS	NS
253	Gage 51-1 ^{bde}	NS	NS	NS
216	Gage 56-1 ^c	NS	NS	NS
257	Gage 66-1 ^a	NS	NS	NS
644	Gage 92-1 ^{bde}	NS	NS	NS
641	Gage 92-2 ^c	NS	NS	NS
642	Gage 92-3 ^c	NS	NS	NS
3091	Gage 98-1 ^c	NS	NS	NS
City of Riverside (Waterman System)				
273	Hunt #6 ^b	3/11/2004	7.1	NR
271	Hunt #10 ^b	3/11/2004	5.6	NR
272	Hunt #11 ^b	3/11/2004	7.5	NR
285	Garner #1 ^b	3/11/2004	ND (4.0)	NR
286	Garner #2 ^b	3/11/2004	6.6	NR
284	Garner #5 ^b	3/11/2004	ND (4.0)	NR
1908	Garner #6 ^b	NS	NS	NR
2576	Garner #7 ^b	NS	NS	NR
254	Raub #2 ^b	3/11/2004	49	NR
224	Raub #3 ^b	3/11/2004	22	NR
255	Raub #4 ^b	3/11/2004	25	NR
255	Raub #4 ^b (Duplicate)	3/11/2004	25	NR
222	Raub #5 ^b	NS	NS	NR
666	Raub #6 ^b	3/11/2004	4.0	NR
665	Raub #8 ^b	3/11/2004	ND (4.0)	NR
202	Scheuer ^b	NS	NS	NR
282	Stiles ^b	3/11/2004	11	NR
249	Warren #1 ^b	NS	NS	NR
247	Warren #4 ^b	NS	NS	NR

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
MARCH 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Riverside Water System Sampling Points				
2946	Iowa Booster (Waterman) ^a	3/2/2004	4.9	ND (0.5)
2947	Gage Delivery (Gage) ^a	3/2/2004	ND (4.0)	ND (0.5)
2948	7th & Chicago (Reservoir) ^a	3/2/2004	ND (4.0)	ND (0.5)
2948	7th & Chicago (Reservoir) ^a Duplicate	3/2/2004	ND (4.0)	ND (0.5)
3018	Gage Arlington ^a	NS	NS	NS
City of Redlands				
542	COR Church St ^b	3/11/2004	ND (4.0)	NR
29	COR Orange St ^c	NS	NS	NR
74	COR Rees ^b	NS	NS	NS
1029	COR Mission ^b	NS	NS	NR
65	COR #31A ^b	NS	NS	NR
265	COR #34 ^b	NS	NS	NR
71	COR #35 ^b	3/11/2004	14	NR
71	COR #35 ^b (Duplicate)	3/11/2004	14	NR
75	COR #37 ^b	3/11/2004	4.4	NR
2673	COR #38 ^c	NS	NS	NR
Riverside Highlands Water Company				
1354	RHWC #2 ^b	NS	NS	NR
1361	RHWC #5 ^b	NS	NS	NR
383	RHWC #18 ^b	3/1/2004	8.0	NR
Other Wells - Agricultural				
82	New York Street Well ^b	NS	NS	NR
81	COR #41 ^b	NS	NS	NR
3174	VA Hospital Well ^b	NS	NS	NR

Notes:

ND(4) = Not detected at the specified limit

NR = Not Required Analysis

NS = Not Sampled

TCE = Trichloroethene

Perchlorate analyzed using EPA Method 314.0

TCE analyzed using EPA Method 502.2

a = Well/sample point sampled on monthly basis, if active

b = Well sampled once every two months, if active

c = Well sampled on Semiannual basis, if active

d = TCE treatment is installed

e = Perchlorate treatment is installed

TABLE 2

**SUMMARY OF WATER LEVEL MEASUREMENTS
MARCH 2004 SAMPLING EVENT**

Well Number	Well Name	Measure Date	Depth to Water	Measuring Point Elevation	Groundwater Elevation	Comments
City of Loma Linda						
3106	Mountain View #3	3/1/2004	148.00	1086	938.00	Static
3171	Mountain View #4	3/1/2004	239.00	1106	867	Pumping
3175	Mountain View #5	3/1/2004	151.00	1085	934	Pumping
693	Richardson #1	3/1/2004	168.00	1077	909	Pumping
707	Richardson #3	3/1/2004	203.00	1078.69	875.69	Pumping
3132	Richardson #4	3/1/2004	170.00	1074	904	Pumping
Mountain View Power						
554	SCE #2 (AUX)	NM	NM	1100	NM	NM
Loma Linda University						
267	LL Univ Anderson #2	NM	NM	1075	NM	NM
717	LL Univ Anderson #3	NM	NM	1070	NM	NM
City of Riverside (Gage System)						
252	Gage #26-1	3/2/2004	120.90	1045.33	924.43	Pumping
258	Gage #27-1	3/2/2004	96.80	1044.64	947.84	Static
259	Gage #27-2	3/2/2004	99.40	1044.64	945.24	Static
260	Gage #29-1	3/2/2004	94.90	1044.43	949.53	Static
219	Gage #29-2	3/2/2004	96.30	1046.31	950.01	Static
220	Gage #29-3	3/2/2004	129.90	1048.75	918.85	Pumping
218	Gage #30-1	3/2/2004	111.90	1054.17	942.27	Static
214	Gage #31-1	3/2/2004	102.80	1054.64	951.84	Static
215	Gage #46-1	3/2/2004	109.30	1065.5	956.2	Static
253	Gage #51-1	3/2/2004	92.00	1044.64	952.64	Static
216	Gage #56-1	3/2/2004	142.70	1065.5	922.8	Static
257	Gage #66-1	3/2/2004	118.20	1044.85	926.65	Static
644	Gage #92-1	3/2/2004	127.70	1047.78	920.08	Static
641	Gage #92-2	3/2/2004	187.80	1053.38	865.58	Pumping
642	Gage #92-3	3/2/2004	135.20	1058.78	923.58	Static
3091	Gage #98-1	3/2/2004	184.30	1058.78	874.48	Pumping
City of Riverside (Waterman System)						
273	Hunt #6	NM	NM	1015.5	NM	NM
271	Hunt #10	NM	NM	1017	NM	NM
272	Hunt #11	NM	NM	1015.7	NM	NM
City of Redlands						
542	COR Church St	3/3/2004	176.0	1344.8	1168.8	Static
29	COR Orange St	3/3/2004	159.0	1282	1123	Static
74	COR Rees	3/3/2004	287.0	1490	1203	Static
1029	COR Mission	3/3/2004	133.0	1130	997	Static
82	New York Street Well	3/3/2004	164.0	1300	1136.0	Static
65	COR #31A	3/3/2004	189.0	1319	1130	Static
265	COR #34	3/3/2004	137.0	1090	953	Static
71	COR #35	3/3/2004	239.0	1395	1156	Static
75	COR #37	3/3/2004	128.0	1435	1307	Static
2673	COR #38	3/3/2004	171.0	1220	1049	Pumping
82	New York Street Well	3/3/2004	164.0	1300	1136	Static
81	COR #41	3/3/2004	180.0	1312	1132	Static

Notes:

All measurements reported in feet below measuring point (ft-bmp)

Water level measurements for all City of Loma Linda, City of Riverside, and City of Redlands wells were obtained by purveyor personnel.

Elevations given in feet above mean sea level (ft-msl)

NM = Not measured

NA = Data not available

Static water levels were allowed to recover a minimum of 30 minutes to obtain a static water level measurement

TABLE 3

**WSCP PRODUCTION WELL SAMPLING PROGRAM
MARCH 2004 SAMPLE IDENTIFICATIONS**

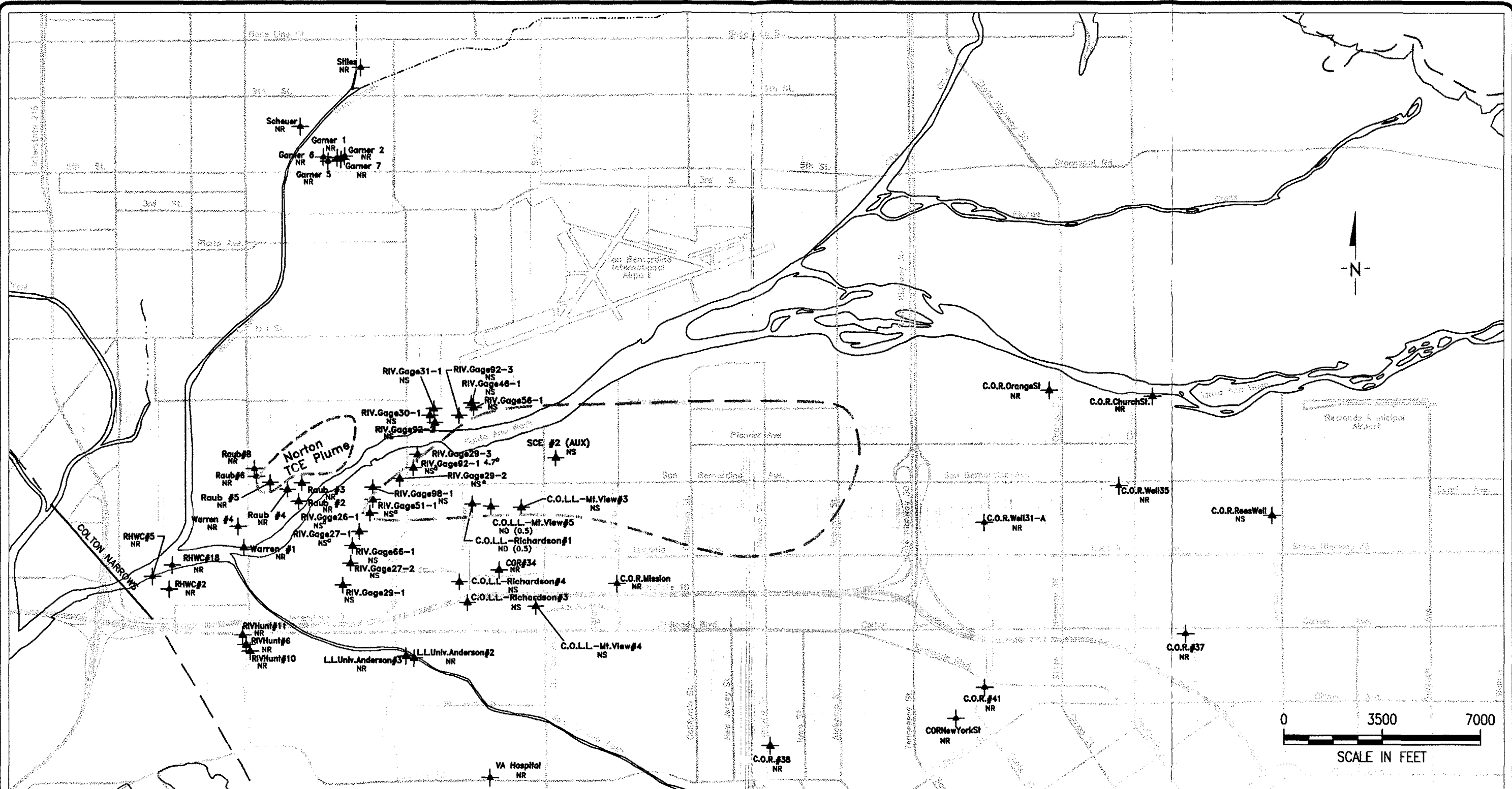
Well Number	Well Name	Sample Date	Sample Time	Sample Number Identification	Analyzed for Perchlorate	Analyzed for TCE
City of Loma Linda						
3106	Mountain View #3	NS	NS	NS	NS	NS
3171	Mountain View #4	NS	NS	NS	NS	NS
3175	Mountain View #5	3/1/2004	12:00	GW-3-3	Yes	Yes
693	Richardson #1	3/1/2004	11:20	GW-3-2	Yes	Yes
707	Richardson #3	NS	NS	NS	NS	NS
3132	Richardson #4	NS	NS	NS	NS	NS
City of Loma Linda Water System Sampling Points						
2967	Mountain View Blend - Lawton	3/1/2004	13:40	GW-3-5	Yes	Yes
2968	Richardson Blend	3/1/2004	13:00	GW-3-4	Yes	Yes
Mountain View Power						
554	SCE #2 (AUX)	NS	NS	NS	NS	NS
Loma Linda University						
267	LL Univ Anderson #2	3/1/2004	15:55	GW-3-7	Yes	NR
717	LL Univ Anderson #3	NS	NS	NS	NS	NR
City of Riverside (Gage System)						
252	Gage #26-1	NS	NS	NS	NS	NS
252	Gage #26-1 (Duplicate)	NS	NS	NS	NS	NS
258	Gage #27-1	NS	NS	NS	NS	NS
259	Gage #27-2	NS	NS	NS	NS	NS
260	Gage #29-1	NS	NS	NS	NS	NS
219	Gage #29-2	NS	NS	NS	NS	NS
220	Gage #29-3	3/1/2004	9:40	GW-3-1	Yes	Yes
218	Gage #30-1	NS	NS	NS	NS	NS
214	Gage #31-1	NS	NS	NS	NS	NS
215	Gage #46-1	NS	NS	NS	NS	NS
253	Gage #51-1	NS	NS	NS	NS	NS
216	Gage #56-1	NS	NS	NS	NS	NS
257	Gage #66-1	NS	NS	NS	NS	NS
644	Gage #92-1	NS	NS	NS	NS	NS
641	Gage #92-2	NS	NS	NS	NS	NS
642	Gage #92-3	NS	NS	NS	NS	NS
3091	Gage #98-1	NS	NS	NS	NS	NS
City of Riverside (Waterman System)						
273	Hunt #6	3/11/2004	11:50	GW-3-19	Yes	NR
271	Hunt #10	3/11/2004	12:25	GW-3-21	Yes	NR
272	Hunt #11	3/11/2004	12:10	GW-3-20	Yes	NR
285	Garner #1	3/11/2004	14:30:00 PM	GW-3-26	Yes	NR
286	Garner #2	3/11/2004	15:00:00 PM	GW-3-27	Yes	NR
284	Garner #5	3/11/2004	14:10	GW-3-25	Yes	NR
1908	Garner #6	NS	NS	NS	NS	NR
2576	Garner #7	NS	NS	NS	NS	NR
254	Raub #2	3/11/2004	8:25	GW-3-14	Yes	NR
224	Raub #3	3/11/2004	13:15	GW-3-24	Yes	NR
255	Raub #4	3/11/2004	12:50	GW-3-22	Yes	NR
255	Raub #4 (Duplicate)	3/11/2004	13:00	GW-3-23	Yes	NR
222	Raub #5	NS	NS	NS	NS	NR
666	Raub #6	3/11/2004	7:50	GW-3-13	Yes	NR
665	Raub #8	3/11/2004	7:25	GW-3-12	Yes	NR
202	Scheuer	NS	NS	NS	NS	NR
282	Stiles	3/11/2004	15:30	GW-3-28	Yes	NR
249	Warren #1	NS	NS	NS	NS	NR
247	Warren #4	NS	NS	NS	NS	NR
City of Riverside Water System Sampling Points						
2946	Iowa Booster (Waterman)	3/2/2004	9:15	GW-3-11	Yes	Yes
2947	Gage Delivery (Gage)	3/2/2004	8:45	GW-3-10	Yes	Yes
2948	7th & Chicago (Reservoir)	3/2/2004	8:00	GW-3-8	Yes	Yes
2948	7th & Chicago (Reservoir) Duplicate	3/2/2004	8:05	GW-3-9	Yes	Yes
3018	Gage Arlington	NS	NS	NS	NS	NS

TABLE 3

**WSCP PRODUCTION WELL SAMPLING PROGRAM
MARCH 2004 SAMPLE IDENTIFICATIONS**

Well Number	Well Name	Sample Date	Sample Time	Sample Number Identification	Analyzed for Perchlorate	Analyzed for TCE
City of Redlands						
542	COR Church St	3/11/2004	10:35	GW-3-17	Yes	NR
29	COR Orange St	NS	NS	NS	NS	NR
74	COR Rees	NS	NS	NS	NS	NS
1029	COR Mission	NS	NS	NS	NS	NR
65	COR #31A	NS	NS	NS	NS	NR
265	COR #34	NS	NS	NS	NS	NR
71	COR #35	3/11/2004	10:05	GW-3-15	Yes	NR
71	COR #35 (Duplicate)	3/11/2004	10:10	GW-3-16	Yes	NR
75	COR #37	3/11/2004	10:55	GW-3-18	Yes	NR
2673	COR #38	NS	NS	NS	NS	NR
Riverside Highlands						
1354	RHWC #2	NS	NS	NS	NS	NR
1361	RHWC #5	NS	NS	NS	NS	NR
383	RHWC #18	3/1/2004	15:05	GW-3-6	Yes	NR
Other Wells - Agricultural						
82	New York Street	NS	NS	NS	NS	NR
81	COR #41	NS	NS	NS	NS	NR
3174	VA Hospital Well ^b	NS	NS	NS	NS	NR

FIGURES



EXPLANATION

- ▲ Wells currently sampled under the existing WSCP Sampling Program
- 3.2 TCE results (µg/L)
 - a TCE treatment is installed
- ND(0.5) Not detected at Indicated Detection Limit
- NS Could not be sampled in March
- NR Not Required

Blending Point Sampling Data

ND (0.5)	C.O.L.L. Mountain View Blend - Lawton
ND (0.5)	C.O.L.L. Richardson Blend
ND (0.5)	Riv. Iowa Booster (Waterman)
ND (0.5)	Riv. Gage Delivery (Gage)
ND (0.5)/ND (0.5)	Riv. 7th + Chicago (Reservoir)
NS	Gage Arlington

--- TCE Plume footprint (5 µg/L) (February 2004 Interpretation)

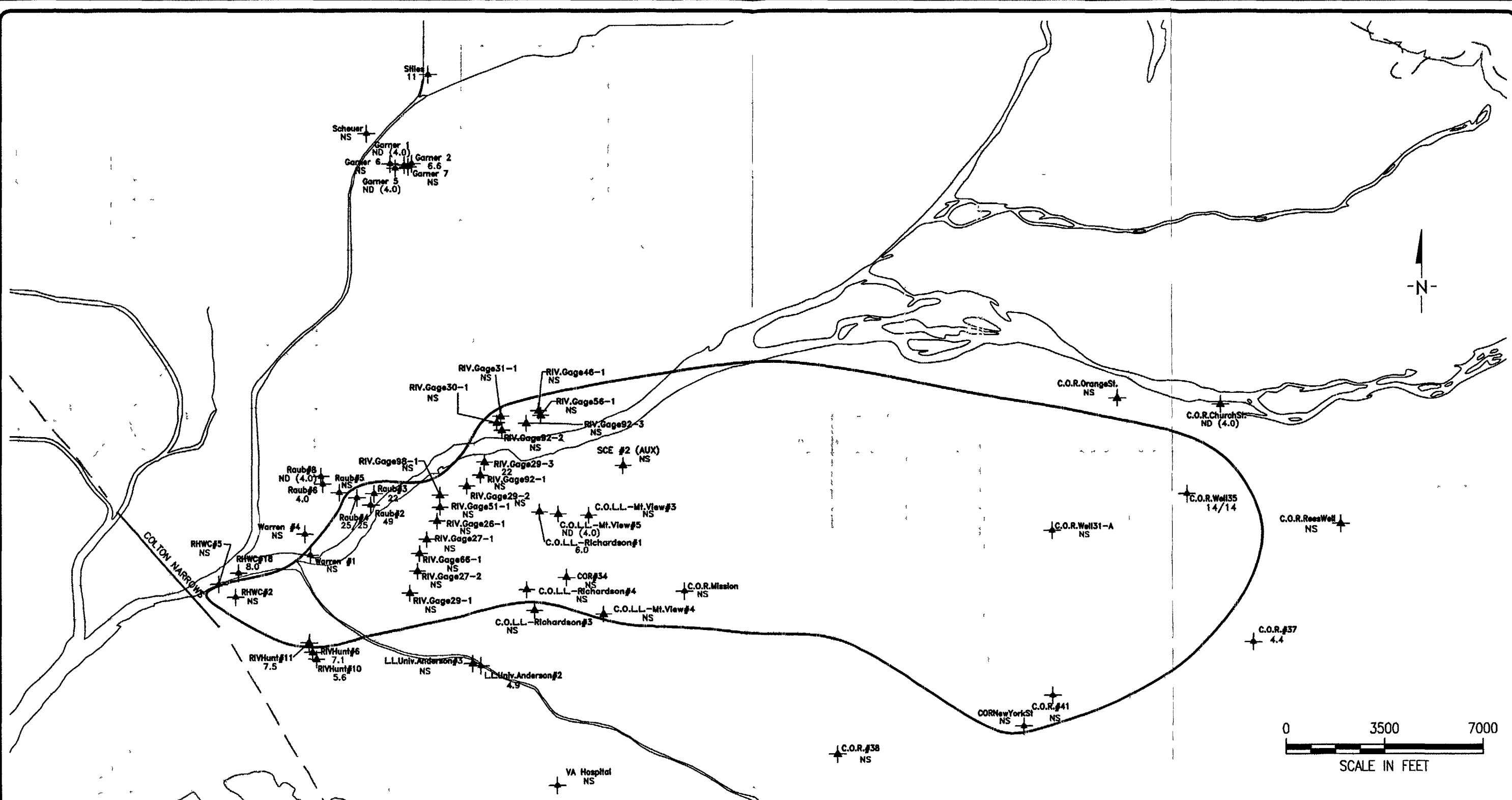
--- Approximate Bunker Hill Basin Boundary

TITLE: WSCP PRODUCTION WELL SAMPLING PROGRAM
TCE DATA RESULTS MARCH 2004

LOCATION: LOCKHEED MARTIN CORPORATION
REDLANDS, CALIFORNIA

CHECKED:	Roy Marroquin	FIGURE: 1
DRAFTED:	Denver Martin	
PROJ.:	0507.071.01	
DATE:	3/30/04	

GeoTrans, Inc.
A TETRA TECH COMPANY



EXPLANATION

- ★ Wells currently sampled under the existing WSCP Sampling Program
- 46 Perchlorate results (µg/L)
- ND(4.0) Not detected at Indicated Detection Limit
- NS Could not be sampled in February
- NR Not Required

Blending Point Sampling Data

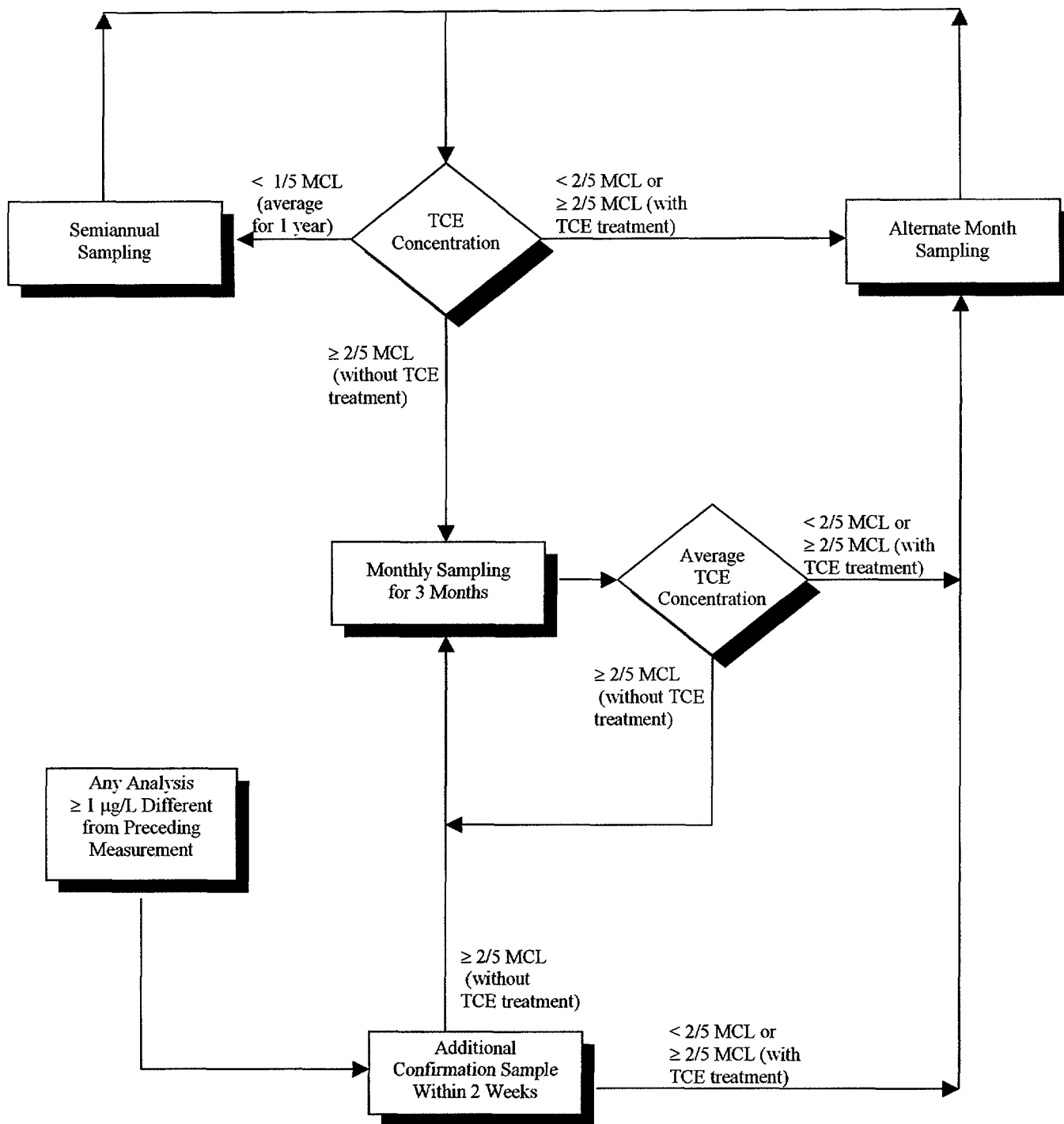
ND (4.0)	C.O.L.L. Mountain View Blend - Lawton
ND (4.0)	C.O.L.L. Richardson Blend
4.9	Riv. Iowa Booster (Waterman)
ND (4.0)	Riv. Gage Delivery (Gage)
ND (4.0)/ND (4.0)	Riv. 7th + Chicago (Reservoir)
NS	Gage Arlington

Perchlorate Plume footprint (6 µg/L)
(February 2004 interpretation)

Approximate Bunker Hill Basin Boundary

TITLE: WSCP PRODUCTION WELL SAMPLING PROGRAM PERCHLORATE DATA RESULTS MARCH 2004		
LOCATION: LOCKHEED MARTIN CORPORATION REDLANDS, CALIFORNIA		
CHECKED:	Roy Marroquin	FIGURE: 2
DRAFTED:	Denver Martin	
PROJ.:	0507.071.01	
DATE:	3/30/04	

GeoTrans, Inc.
A TETRA TECH COMPANY



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of TCE is less than 5 µg/L.

TCE Maximum Contaminant Level (MCL) = 5 µg/L (California Regulations, Title 22, Division 4,

DECISION MATRIX FOR SAMPLING PRODUCTION WELLS FOR TCE

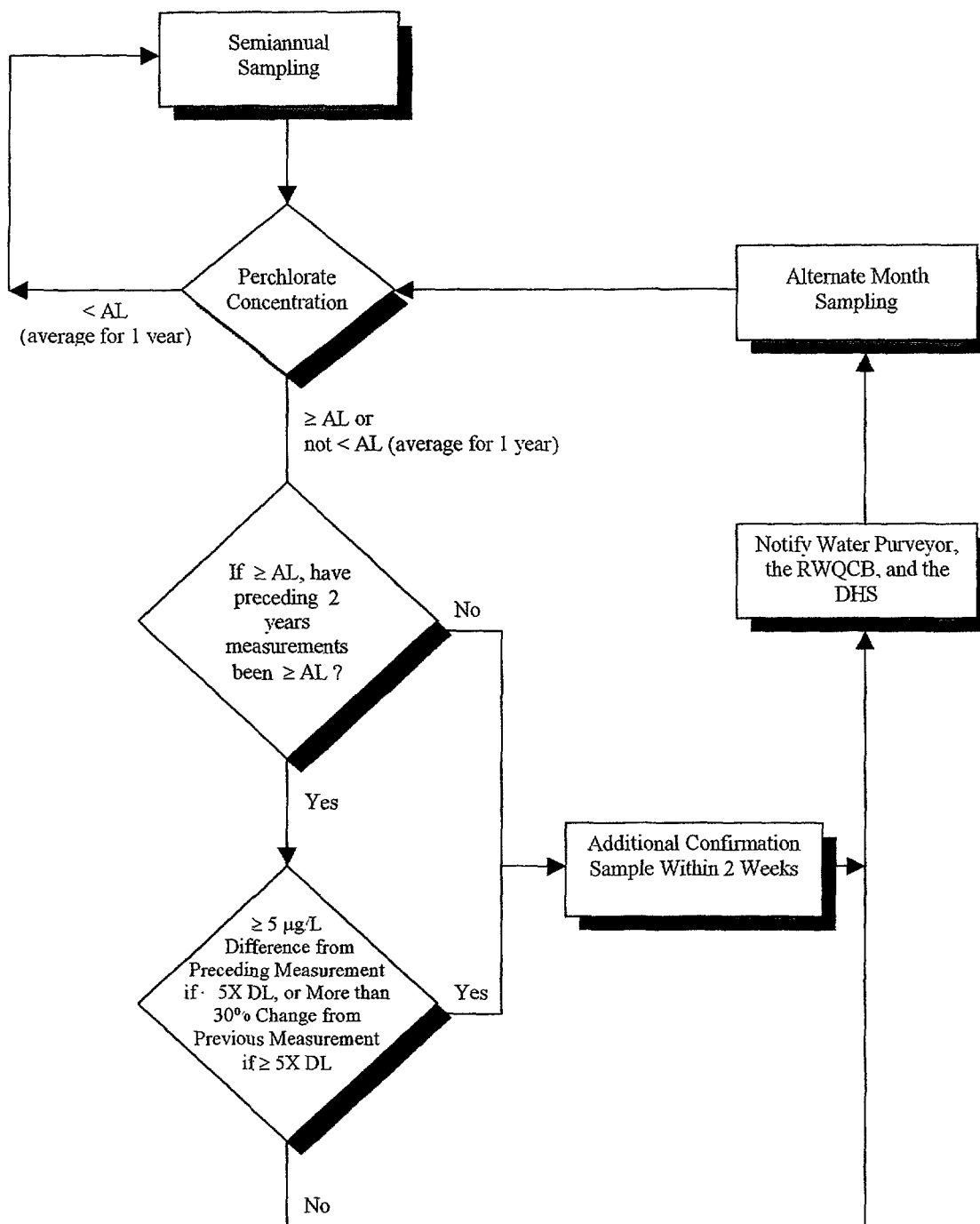
LOCKHEED MARTIN



GeoTrans, Inc.

DATE	04/22/0
PROJ.	0507.071.0

Figure 3



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of perchlorate is less than 6 µg/L.

Perchlorate Action Level (AL) = 6 µg/L (California Department of Health Services, March 2004)

DECISION MATRIX FOR SAMPLING PRODUCTION WELLS FOR PERCHLORATE

LOCKHEED MARTIN



GeoTrans, Inc.

DATE	04/22/0
PROJ.	0507.071.0

Figure 4

ATTACHMENT A

WATER SAMPLING FIELD FORMS

Available Upon Request

ATTACHMENT B

LABORATORY REPORT AND CHAIN-OF-CUSTODY

Available Upon Request

Lockheed Martin Corporation
Corporate Energy Environment, Safety & Health
2550 North Hollywood Way, Suite 301
Burbank, CA 91505
Facsimile 818-847-0256

LOCKHEED MARTIN 

Via Federal Express
BUR0404/092 WBS#48

April 29, 2004

Mr. Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

**RE: March 2004 Production Well Sampling Report,
Crafton-Redlands Plume Project
RWQCB Cleanup and Abatement Orders 94-37 and 97-58**

Dear Mr. Thibeault:

In accordance with the approved Water Supply Contingency Plan, enclosed is one copy of the March 2004 production well sampling report prepared by Tetra Tech for Lockheed Martin Corporation. This report presents results from samples collected at Bunker Hill Basin production wells in March 2004.

Should you have any questions or comments, please contact Bob Simpson at 818-847-0584.

Sincerely,



Thomas D. Blackman, R.G., C.H.G.
Technical Project Manager

TB:bs

Attachment

cc: See Distribution List

Distribution List

(Abbreviated Report without Attachments "A" & "B", which are available upon request)

Department of Health Services (San Bernardino)
William Bryden, City of San Bernardino
Tom Crowley, San Bernardino Valley Water Conservation District
Douglas Headrick, City of Redlands
Don Hough, Riverside Highland Water Company
Ross Lewis, Gage Canal Company
Owen Lu, City of Riverside
Steve Mains, Western Municipal Water District
Dana Beaman, Loma Linda University
Phil Mook, Department of the Air Force, AFBCA
Kevin Mayer, US EPA (Region IX)
Cindy Norried, City of Riverside
Bob Reiter, San Bernardino Valley Municipal Water District
Steve Williams, Department of Health Services (San Diego)
Alain Sharp, Earth Technology Corporation
Greg Snyder, City of Loma Linda
Ron Hoover, Mountain View Power Company
Dieter Wirtzfeld, City of Riverside

2036708



TETRA TECH, INC.
17770 Cartwright Road, Suite 500
Irvine, CA 92614
Telephone (949) 253-2958
FAX (949) 250-6776

May 20, 2004

Lockheed Martin Corporation
West Coast Project Office
2550 N. Hollywood Way, 3rd Floor
Burbank, California 91505

Attention: Mr. Robert Simpson
Project Supervisor

Subject: April 2004 Data Report
Water Supply Contingency Plan
Production Well Sampling Program
Crafton-Redlands Plume Project

Dear Mr. Simpson:

This report presents a summary of the results of the Water Supply Contingency Plan (WSCP) sampling for the month of April 2004. The Water Supply Contingency Plan (WSCP) was prepared by Lockheed Martin Corporation and submitted to the State of California Regional Water Quality Control Board (RWQCB) Santa Ana Region on September 30, 1996. The current WSCP Sampling Schedule was submitted to the RWQCB on April 24, 2002 and was subsequently approved.

In accordance with the approved WSCP Sampling Schedule WSCP, wells and sample points are sampled monthly, on alternate months or semiannually depending on the sample concentrations and concentration trends in the wells. Wells not sampled during the April 2004 sampling event were either not scheduled for sampling or were not in service during the sampling event.

The locations of the WSCP wells are shown on Figures 1 and 2. The WSCP sampling frequency was provided in the approved WSCP Sampling Schedule submitted to the RWQCB on April 24, 2002 and modified in accordance with the WSCP trichloroethene (TCE) and perchlorate decision matrices, provided as Figures 3 and 4, respectively.

RESULTS

A summary of the analytical results for the April 2004 WSCP sampling event for TCE and perchlorate is shown on Figures 1 and 2, respectively, and presented on Table 1. Available groundwater elevation data collected by local purveyors are provided on Table 2.

The water sampling field forms are provided in Attachment A. Chain-of-custody, laboratory data sheets, and Level III laboratory quality assurance/quality control (QA/QC) documentation are provided in Attachment B.

Trichloroethene

Two groundwater samples collected in April met or exceeded 2/5th the MCL for TCE (i.e., greater than or equal to 2.0 micrograms per liter [$\mu\text{g/L}$]) as follows:

Gage 26-1 (2.0 $\mu\text{g/L}$)

Gage 29-2 (5.6 $\mu\text{g/L}$)

In accordance with the WSCP decision matrix, wells at or above 2.0 $\mu\text{g/L}$ for TCE are sampled once a month, if active and not in treatment. Both Gage 26-1 and Gage 29-2 are in treatment and will continue on an alternate month sampling schedule. In accordance with the TCE decision matrix and previous TCE sampling results, Gage 66-1 (not currently in treatment) is scheduled for sampling once a month for three months. At the conclusion of the three-month sampling cycle, the sampling frequency of Gage 66-1 for TCE will be reevaluated. April 2004 was the first month of the three month sampling cycle. In April 2004, the TCE concentration at Gage 66-1 was less than 2/5th of the MCL.

Perchlorate

In the April WSCP sampling, perchlorate was detected at or above the action level (i.e., greater than or equal to 6.0 $\mu\text{g/L}$) in a total of 11 wells.

Wells within the Crafton-Redlands Plume

LL Univ Anderson #2 (6.0 $\mu\text{g/L}$)

Raub #5 (7.9 $\mu\text{g/L}$)

Gage 26-1 (8.5 $\mu\text{g/L}$)

RHWC # 2 (8.5 $\mu\text{g/L}$)

Gage 29-1 (8.2 $\mu\text{g/L}$)

COR New York St (19 $\mu\text{g/L}$)

Gage 29-2 (8.2 $\mu\text{g/L}$)

COR #41 (11 $\mu\text{g/L}$)

Gage 46-1 (32 $\mu\text{g/L}$)

VA Hospital (18 $\mu\text{g/L}$)

Gage 66-1 (16 $\mu\text{g/L}$)

In accordance with the WSCP decision matrix for perchlorate (Figure 4), confirmation samples were collected from three wells on April 19, 2004. Confirmation samples were collected from Gage 46-1, New York Street Well, and the VA Hospital Well. Confirmation sample results are shown on Table 1.


Other Perchlorate Results

Additional wells outside the area of the Crafton-Redlands plume were sampled for perchlorate during the April WSCP sampling. Perchlorate results outside the area of the Crafton-Redlands plume were below the perchlorate action level of 6 µg/L.

CLOSING

Tetra Tech appreciates the opportunity to serve Lockheed Martin Corporation on this project. Should you have any questions or comments, please do not hesitate to call.

Sincerely,
TETRA TECH, INC.



Roy J. Marroquin,
Project Manager



James C. Norman, R.G., CHg.,
Program Director

Attachments:

Table 1: April 2004 Data Results
Table 2: Summary of March 2004 Water Level Measurements
Figure 1: TCE Data Results April 2004
Figure 2: Perchlorate Data Results April 2004
Figure 3: TCE Sampling Decision Matrix
Figure 4: Perchlorate Sampling Decision Matrix

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLES

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
APRIL 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Loma Linda				
3106	Mountain View #3 ^c	4/7/2004	ND (4.0)	ND(0.5)
3171	Mountain View #4 ^c	NS	NS	NS
3175	Mountain View #5 ^b	NS	NS	NS
693	Richardson #1 ^b	4/6/2004	5.4	ND(0.5)
707	Richardson #3 ^c	4/6/2004	ND (4.0)	ND(0.5)
3132	Richardson #4 ^c	4/6/2004	ND (4.0)	ND(0.5)
City of Loma Linda Water System Sampling Points				
2967	Mountain View Blend - Lawton ^a	4/7/2004	ND (4.0)	ND(0.5)
2968	Richardson Blend ^a	4/6/2004	ND (4.0)	ND(0.5)
Mountain View Power				
554	SCE #2 (AUX) ^c	4/5/2004	ND (4.0)	ND(0.5)
Loma Linda University				
267	LL Univ Anderson #2 ^{be}	4/19/2004	6.0	NR
717	LL Univ Anderson #3 ^{be}	4/19/2004	4.5	NR
City of Riverside (Gage System)				
252	Gage 26-1 ^{bde}	4/7/2004	8.5	2.0
258	Gage 27-1 ^{bde}	NS	NS	NS
259	Gage 27-2 ^b	NS	NS	NS
260	Gage 29-1 ^b	4/8/2004	8.2	ND(0.5)
219	Gage 29-2 ^{bde}	4/7/2004	8.2	5.6
220	Gage 29-3 ^{bde}	NS	NS	NS
218	Gage 30-1 ^c	4/7/2004	ND (4.0)	ND(0.5)
214	Gage 31-1 ^b	4/6/2004	ND (4.0)	ND(0.5)
215	Gage 46-1 ^{be}	4/6/2004	32	ND(0.5)
215	Gage 46-1 ^b (Confirmation)	4/19/2004	25	NS
253	Gage 51-1 ^{bde}	NS	NS	NS
216	Gage 56-1 ^c	4/6/2004	ND (4.0)	ND(0.5)
257	Gage 66-1 ^{af}	4/8/2004	16	1.3
644	Gage 92-1 ^{bde}	NS	NS	NS
641	Gage 92-2 ^c	4/7/2004	ND (4.0)	ND(0.5)
642	Gage 92-3 ^c	4/6/2004	ND (4.0)	ND(0.5)
3091	Gage 98-1 ^c	4/7/2004	4.0	ND(0.5)
City of Riverside (Waterman System)				
273	Hunt #6 ^b	NS	NS	NR
271	Hunt #10 ^b	NS	NS	NR
272	Hunt #11 ^b	NS	NS	NR
285	Garner #1 ^b	4/5/2004	ND (4.0)	NR
285	Garner #1 ^b (Duplicate)	4/5/2004	ND (4.0)	NR
286	Garner #2 ^b	NS	NS	NR
284	Garner #5 ^b	4/5/2004	ND (4.0)	NR
1908	Garner #6 ^b	4/5/2004	ND (4.0)	NR
2576	Garner #7 ^b	4/5/2004	ND (4.0)	NR
254	Raub #2 ^b	NS	NS	NR
224	Raub #3 ^b	NS	NS	NR
255	Raub #4 ^b	NS	NS	NR
222	Raub #5 ^b	4/6/2004	7.9	NR
666	Raub #6 ^b	NS	NS	NR
665	Raub #8 ^b	4/6/2004	ND (4.0)	NR
202	Scheuer ^b	NS	NS	NR
282	Stiles ^b	NS	NS	NR
249	Warren #1 ^b	NS	NS	NR
247	Warren #4 ^b	NS	NS	NR

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
APRIL 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Riverside Water System Sampling Points				
2946	Iowa Booster (Waterman) ^a	4/6/2004	ND (4.0)	ND(0.5)
2946	Iowa Booster (Waterman) ^a (Duplicate)	4/6/2004	ND (4.0)	ND(0.5)
2947	Gage Delivery (Gage) ^a	4/6/2004	4.8	ND(0.5)
2948	7th & Chicago (Reservoir) ^a	4/6/2004	ND (4.0)	ND(0.5)
3018	Gage Arlington ^a	4/6/2004	4.8	NR
City of Redlands				
542	COR Church St ^b	NS	NS	NR
29	COR Orange St ^c	NS	NS	NR
74	COR Rees ^b	NS	NS	NS
1029	COR Mission ^b	NS	NS	NR
65	COR #31A ^b	NS	NS	NR
265	COR #34 ^b	NS	NS	NR
71	COR #35 ^b	NS	NS	NR
75	COR #37 ^b	NS	NS	NR
2673	COR #38 ^c	4/19/2004	ND (4.0)	NR
Riverside Highlands Water Company				
1354	RHWC #2 ^b	4/5/2004	8.5	NR
1361	RHWC #5 ^b	4/5/2004	ND (4.0)	NR
383	RHWC #18 ^b	4/5/2004	ND (4.0)	NR
Other Wells - Agricultural				
82	COR New York St ^b	4/7/2004	19	NR
82	COR New York St ^b (Duplicate)	4/7/2004	19	NR
82	COR New York St ^b (Confirmation)	4/19/2004	16	NR
81	COR #41 ^b	4/7/2004	11	NR
3174	VA Hospital ^b	4/8/2004	18	NR
3174	VA Hospital ^b (Duplicate)	4/8/2004	18	NR
3174	VA Hospital ^b (Confirmation)	4/19/2004	14	NR
3174	VA Hospital ^b (Duplicate)	4/19/2004	13	NR

Notes:

ND(4) = Not detected at the specified limit

NR = Not Required Analysis

NS = Not Sampled

TCE = Trichloroethene

Perchlorate analyzed using EPA Method 314.0

TCE analyzed using EPA Method 502.2

Duplicate Samples Identified in Laboratory Reports Using the Well Number

a = Well/sample point sampled on monthly basis, if active

b = Well sampled once every two months, if active

c = Well sampled on Semiannual basis, if active

d = TCE treatment is installed

e = Perchlorate treatment is installed

f = Perchlorate treatment - reserve

TABLE 2

**SUMMARY OF WATER LEVEL MEASUREMENTS
APRIL 2004 SAMPLING EVENT**

Well Number	Well Name	Measure Date	Depth to Water	Measuring Point Elevation	Groundwater Elevation	Comments
City of Loma Linda						
3106	Mountain View #3	4/5/2004	160.00	1086	926.00	Static
3171	Mountain View #4	NM	NM	NM	NM	NM
3175	Mountain View #5	4/5/2004	152.00	1085	933	Static
693	Richardson #1	4/5/2004	177.00	1077	900	Static
707	Richardson #3	4/5/2004	179.00	1078.69	899.69	Static
3132	Richardson #4	4/5/2004	187.00	1074	887	Static
Mountain View Power						
554	SCE #2 (AUX)	NM	NM	1100	NM	NM
Loma Linda University						
267	LL Univ Anderson #2	NM	NM	1075	NM	NM
717	LL Univ Anderson #3	NM	NM	1070	NM	NM
City of Riverside (Gage System)						
252	Gage 26-1	4/6/2004	120.30	1045.33	925.03	Pumping
258	Gage 27-1	4/6/2004	99.20	1044.64	945.44	Static
259	Gage 27-2	4/6/2004	98.00	1044.64	946.64	Static
260	Gage 29-1	4/6/2004	97.40	1044.43	947.03	Static
219	Gage 29-2	4/6/2004	109.10	1046.31	937.21	Pumping
220	Gage 29-3	4/6/2004	129.30	1048.75	919.45	Pumping
218	Gage 30-1	4/6/2004	140.10	1054.17	914.07	Static
214	Gage 31-1	4/6/2004	127.40	1054.64	927.24	Pumping
215	Gage 46-1	4/6/2004	154.00	1065.5	911.5	Pumping
253	Gage 51-1	4/6/2004	115.10	1044.64	929.54	Static
216	Gage 56-1	4/6/2004	189.80	1065.5	875.7	Pumping
257	Gage 66-1	4/6/2004	113.20	1044.85	931.65	Static
644	Gage 92-1	4/6/2004	136.10	1047.78	911.68	Static
641	Gage 92-2	4/6/2004	194.20	1053.38	859.18	Pumping
642	Gage 92-3	4/6/2004	196.00	1058.78	862.78	Pumping
3091	Gage 98-1	4/6/2004	148.00	1058.78	910.78	Static
City of Riverside (Waterman System)						
273	Hunt #6	NM	NM	1015.5	NM	NM
271	Hunt #10	NM	NM	1017	NM	NM
272	Hunt #11	NM	NM	1015.7	NM	NM
City of Redlands						
542	COR Church St	4/1/2004	177.0	1344.8	1167.8	Static
29	COR Orange St	4/1/2004	160.0	1282	1122	Pumping
74	COR Rees	4/1/2004	305.0	1490	1185	Pumping
1029	COR Mission	4/1/2004	160.0	1130	970	Static
82	COR New York St	4/1/2004	170.0	1300	1130.0	Static
65	COR #31A	4/1/2004	190.0	1319	1129	Static
265	COR #34	4/1/2004	146.0	1090	944	Static
71	COR #35	4/1/2004	233.0	1395	1162	Static
75	COR #37	4/1/2004	136.0	1435	1299	Static
2673	COR #38	4/1/2004	114.0	1220	1106	Static
81	COR #41	4/1/2004	175.0	1312	1137	Static

Notes

All measurements reported in feet below measuring point (ft-bmp)

Water level measurements for all City of Loma Linda, City of Riverside, and City of Redlands wells were obtained by purveyor personnel

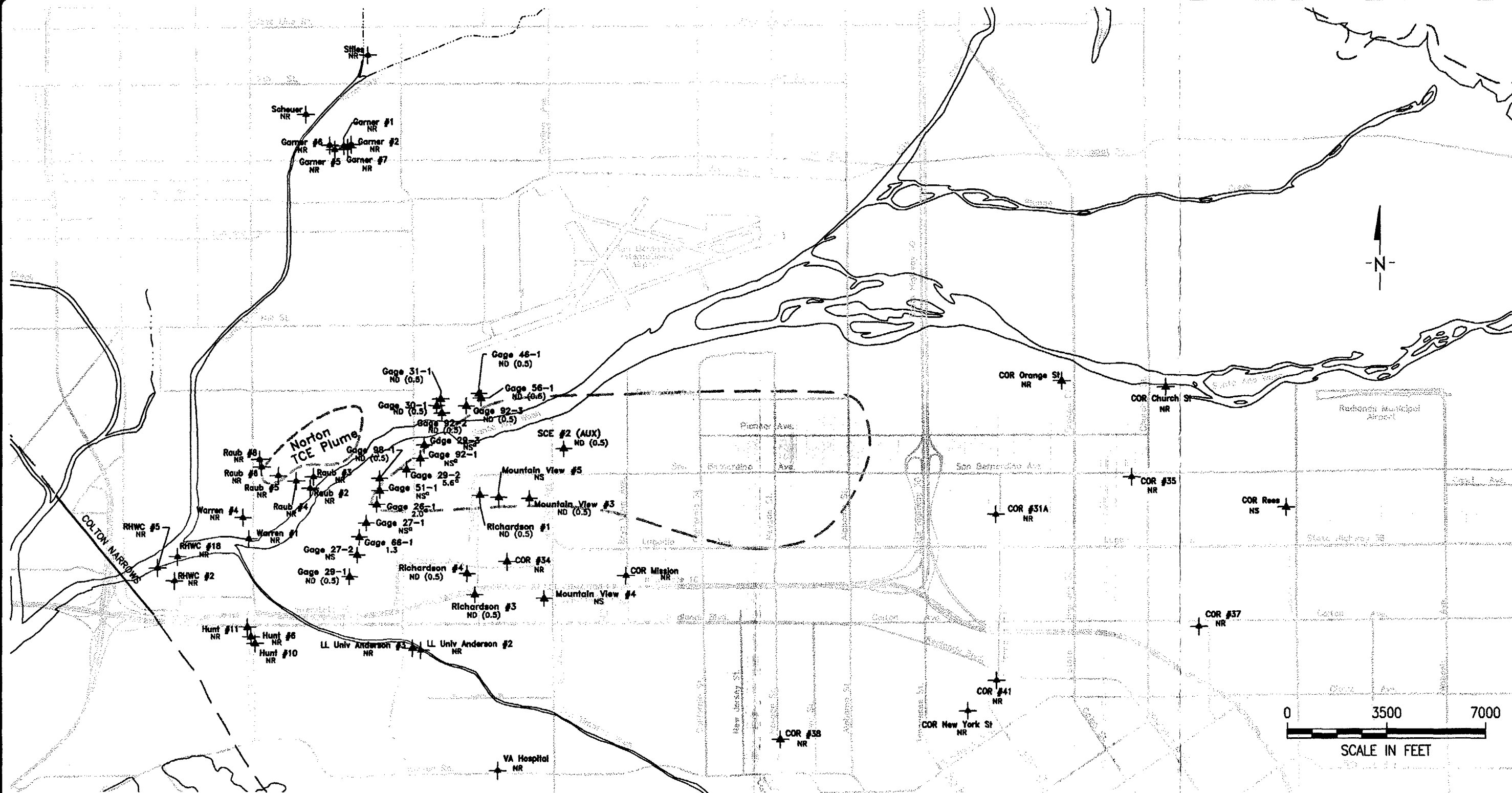
Elevations given in feet above mean sea level (ft-msl)

NM = Not measured

NA = Data not available

Static water levels were allowed to recover a minimum of 30 minutes to obtain a static water level measurement

FIGURES



EXPLANATION

- ▲ Wells currently sampled under the existing WSCP Sampling Program
- 3.2 TCE results (µg/L)
- ◻ TCE treatment is installed
- ND(0.5) Not detected at Indicated Detection Limit
- NS Not Sampled
- NR Not Required

Blending Point Sampling Data

- ND (0.5) Mountain View Blend - Lawton
- ND (0.5) Richardson Blend
- ND (0.5)/ND (0.5) Iowa Booster (Waterman)
- ND (0.5) Gage Delivery (Gage)
- ND (0.5) 7th & Chicago (Reservoir)
- NR Gage Arlington

--- TCE Plume footprint (5 µg/L)
(February 2004 Interpretation)

--- Approximate Bunker Hill Basin Boundary

TITLE: WSCP PRODUCTION WELL SAMPLING PROGRAM
TCE DATA RESULTS APRIL 2004
LOCATION: LOCKHEED MARTIN CORPORATION
REDLANDS, CALIFORNIA



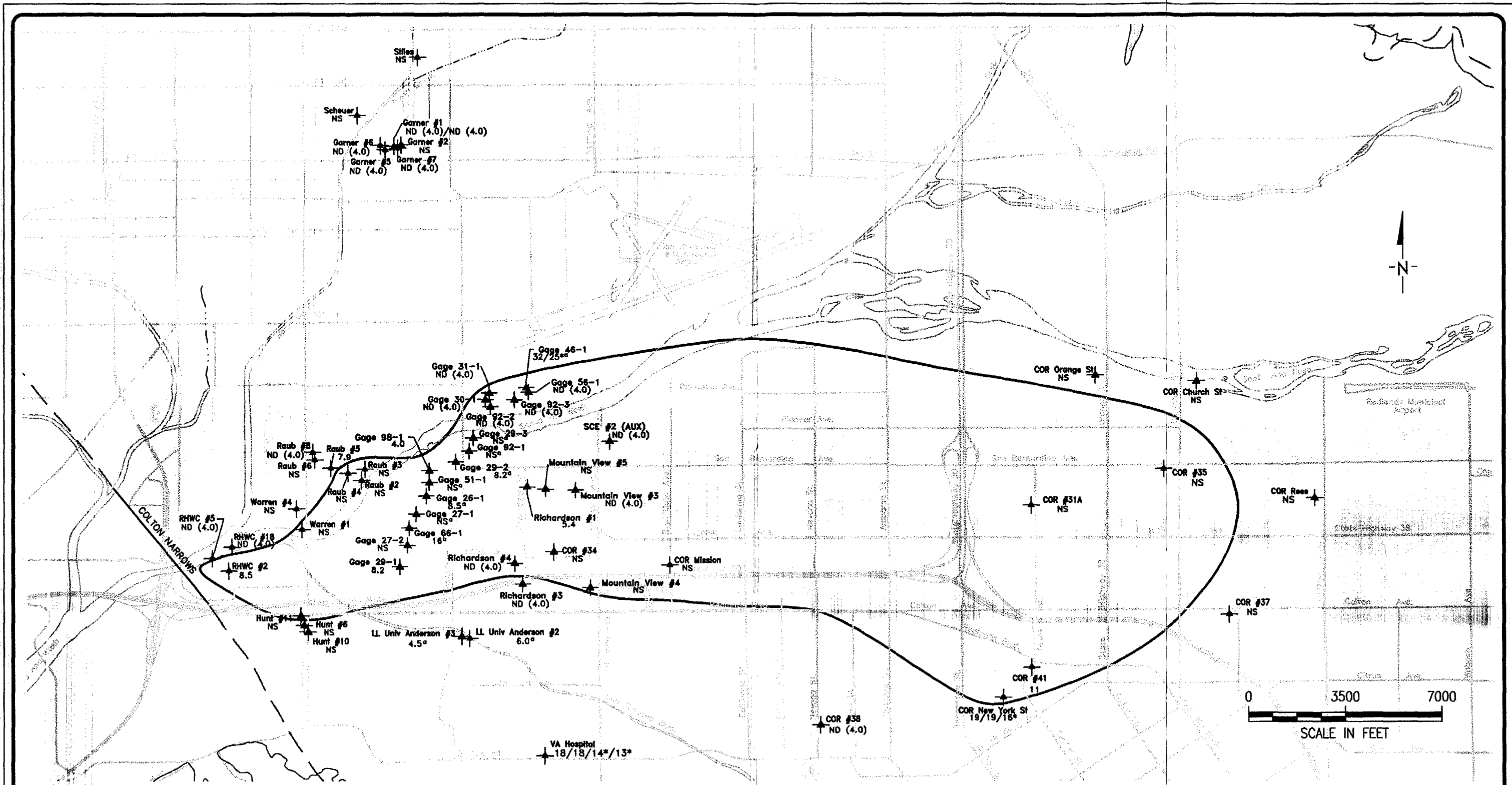
TETRA TECH INC

17770 CARTWRIGHT RD., SUITE 500, IRVINE, CALIFORNIA 92614

CHECKED: Roy Marroquin
DRAFTED: Denver Martin
PROJ.: 0507.071
DATE: 5/10/04

FIGURE:

1



EXPLANATION

- ★ Wells currently sampled under the existing WSCP Sampling Program
- 46 Perchlorate results (µg/L)
- ND(4.0) Not detected at indicated Detection Limit
- a Perchlorate treatment is installed
- b Perchlorate treatment - reserve
- NS Not Sampled
- NR Not Required
- * Confirmation Sample

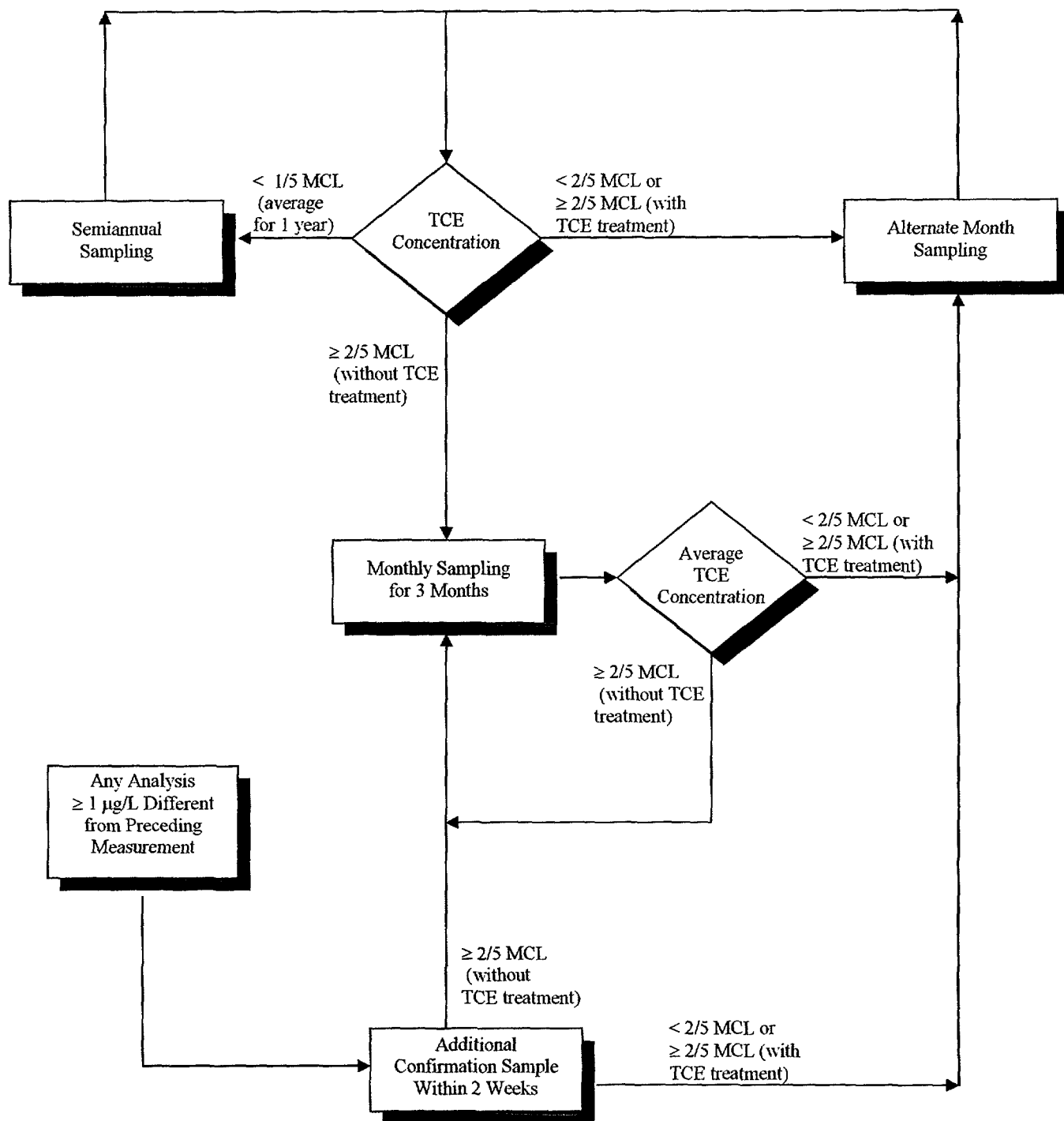
Blending Point Sampling Data

ND (4.0)	Mountain View Blend - Lawton
ND (4.0)	Richardson Blend
ND (4.0)/ND (4.0)	Iowa Booster (Waterman)
4.8	Gage Delivery (Gage)
ND (4.0)	7th & Chicago (Reservoir)
4.8	Gage Arlington

Perchlorate Plume footprint (6 µg/L)
(February 2004 Interpretation)

Approximate Bunker Hill Basin Boundary

TITLE: PERCHLORATE DATA RESULTS APRIL 2004 WSCP PRODUCTION WELL SAMPLING PROGRAM	
LOCATION: LOCKHEED MARTIN CORPORATION REDLANDS, CALIFORNIA	
TETRA TECH INC 17770 CARTWRIGHT RD, SUITE 500, IRVINE, CALIFORNIA 92614	CHECKED: Roy Marroquin
	DRAFTED: Denver Martin
	PROJ.: 0507.071
	DATE: 5/10/04
FIGURE: 2	



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of TCE is less than 5 µg/L.

TCE Maximum Contaminant Level (MCL) = 5 µg/L (California Regulations, Title 22, Division 4,

DECISION MATRIX FOR SAMPLING PRODUCTION WELLS FOR TCE

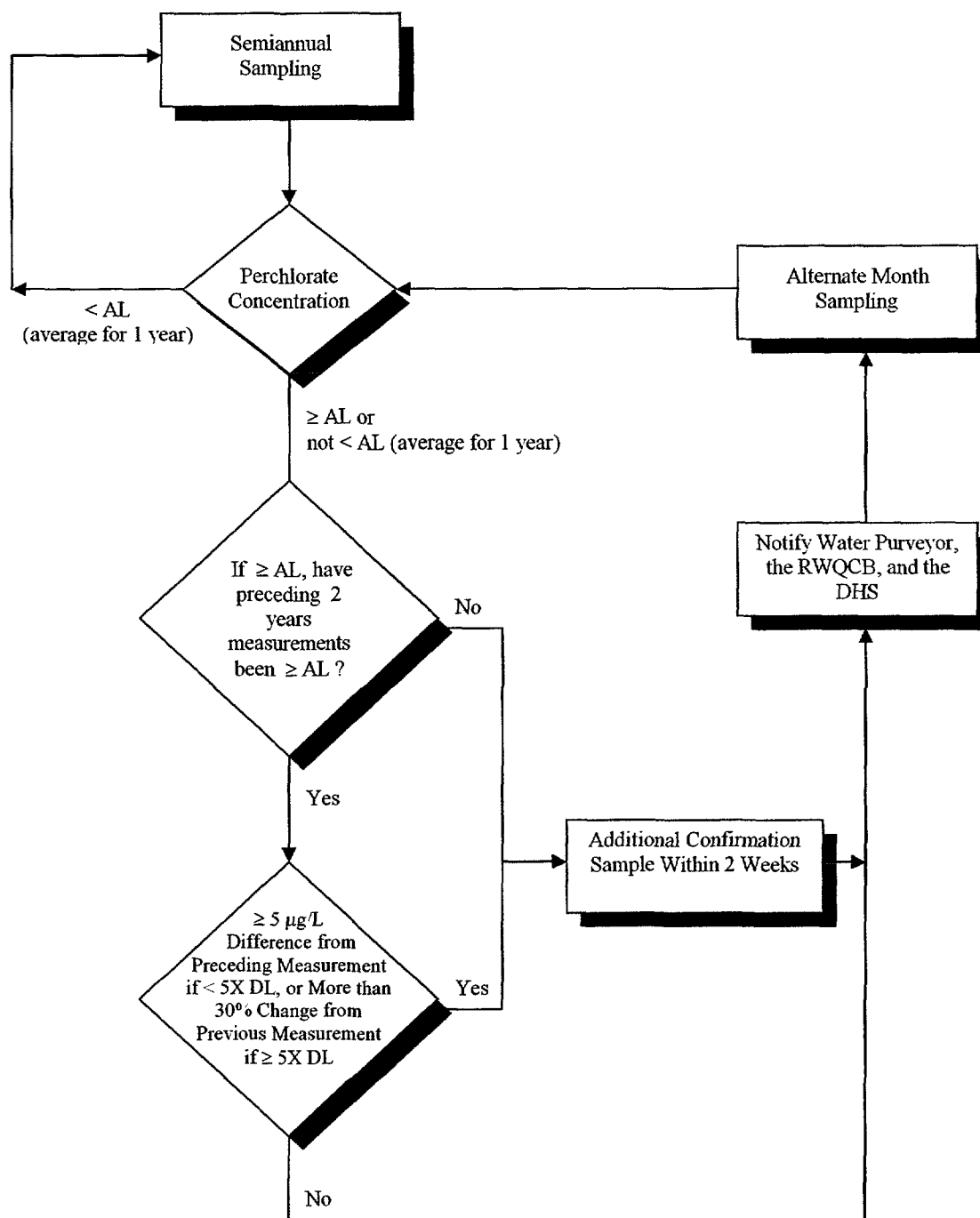
LOCKHEED MARTIN



TETRA TECH, INC.
17770 CARTWRIGHT RD., SUITE 500
IRVINE, CA 92614

DATE: 5/11/04
PROJ.: 0507.071.01

Figure 3



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of perchlorate is less than 6 µg/L.

Perchlorate Action Level (AL) = 6 µg/L (California Department of Health Services, March 2004)

**DECISION MATRIX FOR SAMPLING
PRODUCTION WELLS FOR PERCHLORATE**

LOCKHEED MARTIN



TETRA TECH, INC.
17770 CARTWRIGHT RD. SUITE 500
IRVINE, CA 92614

DATE:	5/11/04
PROJ.:	0507.071.01

Figure 4

ATTACHMENT A
WATER SAMPLING FIELD FORMS

Available Upon Request

ATTACHMENT B

LABORATORY REPORT AND CHAIN-OF-CUSTODY

Available Upon Request

Lockheed Martin Corporation
Corporate Energy, Environment, Safety & Health
2550 North Hollywood Way, Suite 301
Burbank, CA 91505
Facsimile 818-847-0256



May 19, 2004

Via Federal Express
BUR0504/098 WBS#48

Mr. Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

**RE: April 2004 Production Well Sampling Report,
Crafton-Redlands Plume Project
RWQCB Cleanup and Abatement Orders 94-37 and 97-58**

Dear Mr. Thibeault:

In accordance with the approved Water Supply Contingency Plan, enclosed is one copy of the April 2004 production well sampling report prepared by Tetra Tech for Lockheed Martin Corporation. This report presents results from samples collected at Bunker Hill Basin production wells in April 2004.

Should you have any questions or comments, please contact Bob Simpson at 818-847-0584.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom D. Blackman", followed by a long horizontal line.

Thomas D. Blackman, R.G., C.HG.
Technical Project Manager

TB:bb

Attachment

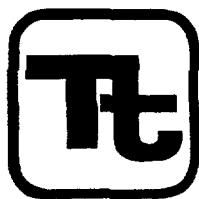
c: See Distribution List

Distribution List

(Abbreviated Report without Attachments "A" & "B," which are available upon request)

Department of Health Services (San Bernardino)
William Bryden, City of San Bernardino
Tom Crowley, San Bernardino Valley Water Conservation District
Douglas Headrick, City of Redlands
Don Hough, Riverside Highland Water Company
Ross Lewis, Gage Canal Company
Owen Lu, City of Riverside
Steve Mains, Western Municipal Water District
Dana Beaman, Loma Linda University
Phil Mook, Department of the Air Force, AFBCA
Kevin Mayer, US EPA (Region IX)
Cindy Norried, City of Riverside
Bob Reiter, San Bernardino Valley Municipal Water District
Steve Williams, Department of Health Services (San Diego)
Alain Sharp, Earth Technology Corporation
Greg Snyder, City of Loma Linda
Ron Hoover, Mountain View Power Company
Dieter Wirtzfeld, City of Riverside

2036708



TETRA TECH, INC.
17770 Cartwright Road, Suite 500
Irvine, CA 92614
Telephone (949) 253-2958
FAX (949) 250-6776

June 29, 2004

Lockheed Martin Corporation
West Coast Project Office
2550 N. Hollywood Way, 3rd Floor
Burbank, California 91505

Attention: Mr. Robert Simpson
Project Supervisor

Subject: May 2004 Data Report
Water Supply Contingency Plan
Production Well Sampling Program
Crafton-Redlands Plume Project

Dear Mr. Simpson:

This report presents a summary of the results of the Water Supply Contingency Plan (WSCP) sampling for the month of May 2004. The Water Supply Contingency Plan (WSCP) was prepared by Lockheed Martin Corporation and submitted to the State of California Regional Water Quality Control Board (RWQCB) Santa Ana Region on September 30, 1996. The current WSCP Sampling Schedule was submitted to the RWQCB on April 24, 2002 and was subsequently approved.

In accordance with the approved WSCP Sampling Schedule, WSCP wells and sample points are sampled monthly, on alternate months or semiannually depending on the sample concentrations and concentration trends in the wells. Wells not sampled during the May 2004 sampling event were either not scheduled for sampling or were not in service during the sampling event.

The locations of the WSCP wells are shown on Figures 1 and 2. The WSCP sampling frequency was provided in the approved WSCP Sampling Schedule submitted to the RWQCB on April 24, 2002 and modified in accordance with the WSCP trichloroethene (TCE) and perchlorate decision matrices, provided as Figures 3 and 4, respectively.

RESULTS

A summary of the analytical results for the May 2004 WSCP sampling event for TCE and perchlorate is shown on Figures 1 and 2, respectively, and presented on Table 1. Available groundwater elevation data collected by local purveyors are provided on Table 2.

The water sampling field forms are provided in Attachment A. Chain-of-custody, laboratory data sheets, and Level III laboratory quality assurance/quality control (QA/QC) documentation are provided in Attachment B.

Trichloroethene

Four samples collected in the May WSCP sampling event met or exceeded 2/5th the MCL for TCE (i.e., greater than or equal to 2.0 micrograms per liter [$\mu\text{g/L}$]) as follows:

Gage 29-2 (5.2 $\mu\text{g/L}$)

Gage 29-3 (5.0 $\mu\text{g/L}$)

Gage 92-1 (3.9 $\mu\text{g/L}$)

Gage Arlington (3.6 $\mu\text{g/L}$)

In accordance with the WSCP decision matrix (Figure 3), wells at or above 2.0 $\mu\text{g/L}$ for TCE are sampled once a month, if active and not in treatment. Gage 29-2, Gage 29-3, and Gage 92-1 are all in treatment and will continue to be sampled on an alternate month schedule. In accordance with the TCE decision matrix and previous TCE sampling results, Gage 66-1 (not currently in treatment) is scheduled for sampling once a month for three months. At the conclusion of the three-month sampling cycle, the sampling frequency of Gage 66-1 for TCE will be reevaluated. April 2004 was the first month of the three-month sampling cycle. Gage 66-1 was not available for sampling in May 2004.

Perchlorate

Certain wells where perchlorate was detected at or above the 6.0 $\mu\text{g/L}$ action level (e.g. Stiles) are outside of the Crafton-Redlands Plume. Other wells may indicate contamination from multiple sources. A total of 15 samples collected in the May WSCP sampling event contained perchlorate at or above the 6.0 $\mu\text{g/L}$ action level as follows:

Gage 27-1 (12 $\mu\text{g/L}$)

Raub #4 (15 $\mu\text{g/L}$)

Gage 27-2 (10 $\mu\text{g/L}$)

Gage Delivery (9.9 $\mu\text{g/L}$)

Gage 29-2 (7.9 $\mu\text{g/L}$)

7th & Chicago (6.2 $\mu\text{g/L}$)

Gage 29-3 (21 $\mu\text{g/L}$)

Gage Arlington (9.6 $\mu\text{g/L}$)

Gage 46-1 (25 $\mu\text{g/L}$)

COR #31A (56 $\mu\text{g/L}$)

Gage 92-1 (41 $\mu\text{g/L}$)

COR #41 (10 $\mu\text{g/L}$)

Hunt #6 (6.3 $\mu\text{g/L}$)

Stiles (11 $\mu\text{g/L}$)

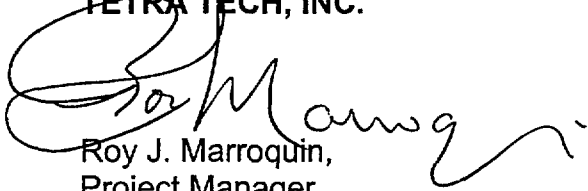
Hunt #11 (7.0 $\mu\text{g/L}$)

In accordance with the WSCP decision matrix for perchlorate (Figure 4), confirmation samples were collected from Gage 92-1, Gage Delivery, and 7th & Chicago on May 13, 2004. Confirmation sample results are shown on Table 1.

CLOSING

Tetra Tech appreciates the opportunity to serve Lockheed Martin Corporation on this project. Should you have any questions or comments, please do not hesitate to call.

Sincerely,
TETRA TECH, INC.



Roy J. Marroquin,
Project Manager



James C. Norman, R.G., CHg.,
Program Director

Attachments:

Table 1: May 2004 Data Results
Table 2: Summary of May 2004 Water Level Measurements
Figure 1: TCE Data Results May 2004
Figure 2: Perchlorate Data Results May 2004
Figure 3: TCE Sampling Decision Matrix
Figure 4: Perchlorate Sampling Decision Matrix

TABLES

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
MAY 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Loma Linda				
3106	Mountain View #3 ^c	NS	NS	NS
3171	Mountain View #4 ^c	NS	NS	NS
3175	Mountain View #5 ^b	5/4/2004	ND (4.0)	ND(0.5)
693	Richardson #1 ^b	NS	NS	NS
707	Richardson #3 ^c	NS	NS	NS
3132	Richardson #4 ^c	NS	NS	NS
City of Loma Linda Water System Sampling Points				
2967	Mountain View Blend - Lawton ^a	5/4/2004	ND (4.0)	ND(0.5)
2968	Richardson Blend ^a	5/4/2004	ND (4.0)	ND(0.5)
Mountain View Power				
554	SCE #2 (AUX) ^c	NS	NS	NS
Loma Linda University				
267	LL Univ Anderson #2 ^{be}	NS	NS	NR
717	LL Univ Anderson #3 ^{be}	NS	NS	NR
City of Riverside (Gage System)				
252	Gage 26-1 ^{bde}	NS	NS	NS
258	Gage 27-1 ^{bde}	5/4/2004	12	ND(0.5)
259	Gage 27-2 ^b	5/4/2004	10	NS
260	Gage 29-1 ^b	NS	NS	NS
219	Gage 29-2 ^{bde}	5/4/2004	7.9	5.2
220	Gage 29-3 ^{bde}	5/4/2004	21	5.0
218	Gage 30-1 ^c	NS	NS	NS
214	Gage 31-1 ^b	NS	NS	NS
215	Gage 46-1 ^{be}	5/4/2004	25	NS
253	Gage 51-1 ^{bde}	NS	NS	NS
216	Gage 56-1 ^c	NS	NS	NS
257	Gage 66-1 ^{af}	NS	NS	NS
644	Gage 92-1 ^{bde}	5/4/2004	41	3.9
644	Gage 92-1 ^{bde} (Confirmation)	5/13/2004	33	NS
641	Gage 92-2 ^c	NS	NS	NS
642	Gage 92-3 ^c	NS	NS	NS
3091	Gage 98-1 ^c	NS	NS	NS
City of Riverside (Waterman System)				
273	Hunt #6 ^b	5/4/2004	6.3	NR
271	Hunt #10 ^b	NS	NS	NR
272	Hunt #11 ^b	5/4/2004	7.0	NR
285	Garner #1 ^b	NS	NS	NR
286	Garner #2 ^b	NS	NS	NR
284	Garner #5 ^b	NS	NS	NR
1908	Garner #6 ^b	NS	NS	NR
2576	Garner #7 ^b	NS	NS	NR
254	Raub #2 ^b	NS	NS	NR
224	Raub #3 ^b	NS	NS	NR
255	Raub #4 ^b	5/4/2004	15	NR
255	Raub #4 ^b (Duplicate)	5/4/2004	15	NR
222	Raub #5 ^b	NS	NS	NR
666	Raub #6 ^b	5/4/2004	5.1	NR
665	Raub #8 ^b	NS	NS	NR
202	Scheuer ^b	NS	NS	NR
282	Stiles ^b	5/4/2004	11	NR
249	Warren #1 ^b	NS	NS	NR
247	Warren #4 ^b	NS	NS	NR

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
MAY 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Riverside Water System Sampling Points				
2946	Iowa Booster ^a	5/4/2004	ND (4.0)	ND(0.5)
2946	Iowa Booster ^a (Duplicate)	5/4/2004	ND (4.0)	NS
2947	Gage Delivery ^a	5/4/2004	9.9	0.83
2947	Gage Delivery ^a (Confirmation)	5/13/2004	6.0	NS
2948	7th & Chicago ^a	5/4/2004	6.2	ND(0.5)
2948	7th & Chicago ^a (Confirmation)	5/13/2004	4.1	NS
2948	7th & Chicago ^a (Duplicate)	5/13/2004	4.3	NS
3018	Gage Arlington ^a	5/4/2004	9.6	3.6
City of Redlands				
542	COR Church St ^b	5/4/2004	5.4	NR
29	COR Orange St ^c	5/4/2004	ND (4.0)	NR
74	COR Rees ^b	5/4/2004	4.3	ND(0.5)
74	COR Rees ^b (Duplicate)	5/4/2004	NS	ND(0.5)
1029	COR Mission ^b	NS	NS	NR
65	COR #31A ^b	5/13/2004	56	NR
265	COR #34 ^b	NS	NS	NR
71	COR #35 ^b	NS	NS	NR
75	COR #37 ^b	NS	NS	NR
2673	COR #38 ^c	NS	NS	NR
Riverside Highlands Water Company				
1354	RHWC #2 ^b	NS	NS	NR
1361	RHWC #5 ^b	NS	NS	NR
383	RHWC #18 ^b	NS	NS	NR
Other Wells - Agricultural				
82	COR New York St ^b	NS	NS	NR
81	COR #41 ^b	5/13/2004	10	NR
3174	VA Hospital ^b	NS	NS	NR

Notes.

ND(4) = Not detected at the specified limit

NR = Not Required Analysis

NS = Not Sampled

TCE = Trichloroethene

Perchlorate analyzed using EPA Method 314.0

TCE analyzed using EPA Method 502.2

Duplicate Samples Identified in Laboratory Reports Using the Well Number

COR #31A does not pump into the potable system.

a = Well/sample point sampled on monthly basis, if active

b = Well sampled once every two months, if active

c = Well sampled on Semiannual basis, if active

d = TCE treatment is installed

e = Perchlorate treatment is installed

f = Perchlorate treatment - reserve

TABLE 2

**SUMMARY OF WATER LEVEL MEASUREMENTS
MAY 2004 SAMPLING EVENT**

Well Number	Well Name	Measure Date	Depth to Water	Measuring Point Elevation	Groundwater Elevation	Comments
City of Loma Linda						
3106	Mountain View #3	5/3/2004	171.00	1086	915.00	Static
3171	Mountain View #4	NM	NM	NM	NM	NM
3175	Mountain View #5	5/3/2004	179.00	1085	906	Static
693	Richardson #1	5/3/2004	194.00	1077	883	Static
707	Richardson #3	5/3/2004	204.00	1078.69	874.69	Static
3132	Richardson #4	5/3/2004	NM	NM	NM	NM
Mountain View Power						
554	SCE #2 (AUX)	NM	NM	1100	NM	NM
Loma Linda University						
267	LL Univ Anderson #2	NM	NM	1075	NM	NM
717	LL Univ Anderson #3	NM	NM	1070	NM	NM
City of Riverside (Gage System)						
252	Gage 26-1	5/4/2004	128.00	1045.33	917.33	Pumping
258	Gage 27-1	5/4/2004	118.00	1044.64	926.64	Pumping
259	Gage 27-2	5/4/2004	118.00	1044.64	926.64	Pumping
260	Gage 29-1	5/4/2004	110.00	1044.43	934.43	Pumping
219	Gage 29-2	5/4/2004	113.30	1046.31	933.01	Pumping
220	Gage 29-3	5/4/2004	128.40	1048.75	920.35	Pumping
218	Gage 30-1	5/4/2004	212.50	1054.17	841.67	Pumping
214	Gage 31-1	5/4/2004	150.90	1054.64	903.74	Pumping
215	Gage 46-1	5/4/2004	143.60	1065.5	921.9	Pumping
253	Gage 51-1	5/4/2004	175.40	1044.64	869.24	Pumping
216	Gage 56-1	5/4/2004	207.80	1065.5	857.7	Pumping
257	Gage 66-1	5/4/2004	153.80	1044.85	891.05	Pumping
644	Gage 92-1	5/4/2004	204.10	1047.78	843.68	Pumping
641	Gage 92-2	5/4/2004	202.00	1053.38	851.38	Pumping
642	Gage 92-3	5/4/2004	219.00	1058.78	839.78	Pumping
3091	Gage 98-1	5/4/2004	209.40	1058.78	849.38	Pumping
City of Riverside (Waterman System)						
273	Hunt #6	NM	NM	1015.5	NM	NM
271	Hunt #10	NM	NM	1017	NM	NM
272	Hunt #11	NM	NM	1015.7	NM	NM
City of Redlands						
542	COR Church St	5/1/2004	176.0	1344.8	1168.8	Static
29	COR Orange St	5/1/2004	164.0	1282	1118	Pumping
74	COR Rees	5/1/2004	312.0	1490	1178	Pumping
1029	COR Mission	5/1/2004	147.0	1130	983	Static
82	COR New York St	5/1/2004	NM	1300	NM	NM
65	COR #31A	5/1/2004	190.0	1319	1129	Static
265	COR #34	5/1/2004	140.0	1090	950	Static
71	COR #35	5/1/2004	235.0	1395	1160	Static
75	COR #37	5/1/2004	134.0	1435	1301	Static
2673	COR #38	5/1/2004	181.0	1220	1039	Pumping
81	COR #41	5/1/2004	NM	1312	NM	NM

Notes:

All measurements reported in feet below measuring point (ft-bmp)

Water level measurements for all City of Loma Linda, City of Riverside, and City of Redlands wells were obtained by purveyor personnel

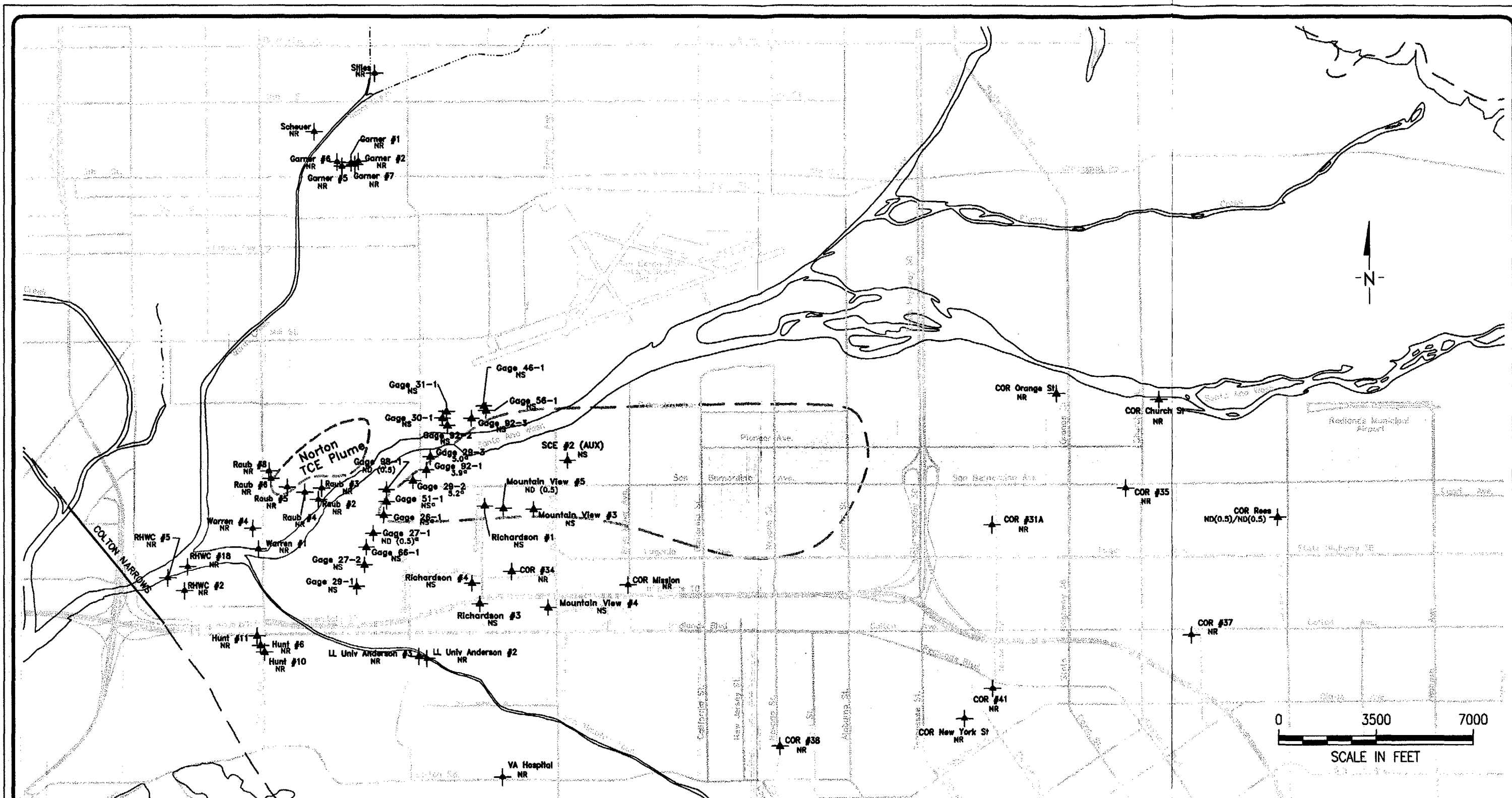
Elevations given in feet above mean sea level (ft-msl)

NM = Not measured

NA = Data not available

Static water levels were allowed to recover a minimum of 30 minutes to obtain a static water level measurement

FIGURES



EXPLANATION

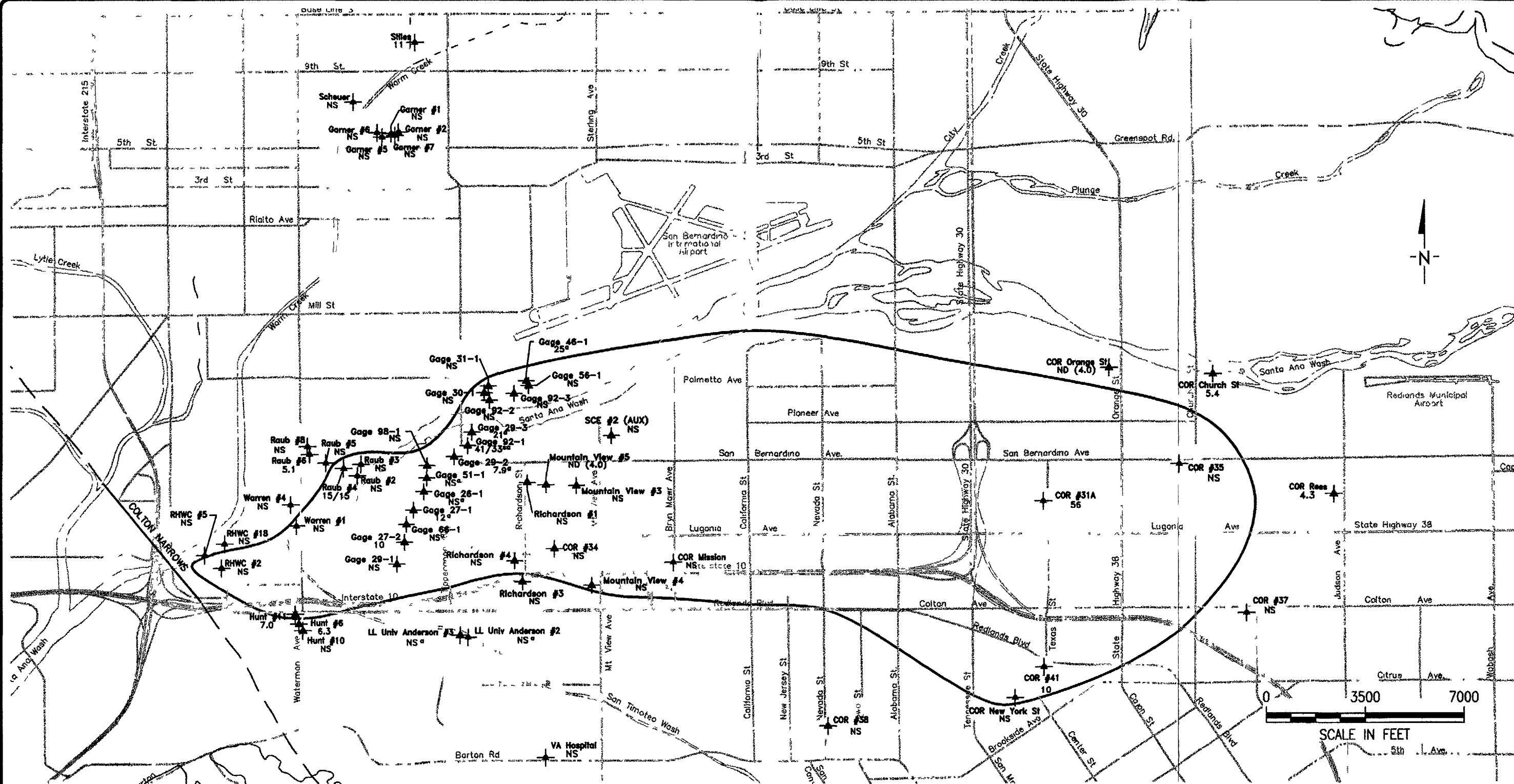
- ★ Wells currently sampled under the existing WSCP Sampling Program
- 3.2 TCE results (µg/L)
- ◻ TCE treatment is installed
- ND(0.5) Not detected at indicated Detection Limit
- NS Not Sampled
- NR Not Required
- Confirmation Sample

Blending Point Sampling Data

- ND (0.5) Mountain View Blend - Lawton
- ND (0.5) Richardson Blend
- ND (0.5) Iowa Booster (Waterman)
- 0.83 Gage Delivery (Gage)
- ND (0.5) 7th & Chicago (Reservoir)
- 3.6 Gage Arlington

- TCE Plume footprint (5 µg/L) (February 2004 Interpretation)
- Approximate Bunker Hill Basin Boundary

TITLE: WSCP PRODUCTION WELL SAMPLING PROGRAM TCE DATA RESULTS MAY 2004	
LOCATION: LOCKHEED MARTIN CORPORATION REDLANDS, CALIFORNIA	
TETRA TECH INC <small>17770 CARTWRIGHT RD. SUITE 500, IRVINE, CALIFORNIA 92614</small>	CHECKED: Roy Marraquin
	DRAFTED: Denver Martin
	PROJ.: 0507.071
	DATE: 6/7/04
FIGURE: 1	



EXPLANATION

- ▲ Wells currently sampled under the existing WSCP Sampling Program
- 46 Perchlorate results (µg/L)
- ND(4.0) Not detected at Indicated Detection Limit
- a Perchlorate treatment is installed
- b Perchlorate treatment - reserve
- NS Not Sampled
- NR Not Required
- * Confirmation Sample

M:\Redlands\0507071\May04-Flg2(TT) dwg

Blending Point Sampling Data

ND (4.0)	Mountain View Blend - Lawton
ND (4.0)	Richardson Blend
ND (4.0)/ND (4.0)	Iowa Booster (Waterman)
9.9/6.0*	Gage Delivery (Gage)
6.2/4.1*/4.3	7th & Chicago (Reservoir)
9.6	Gage Arlington

Perchlorate Plume footprint (6 µg/L)
(February 2004 interpretation)

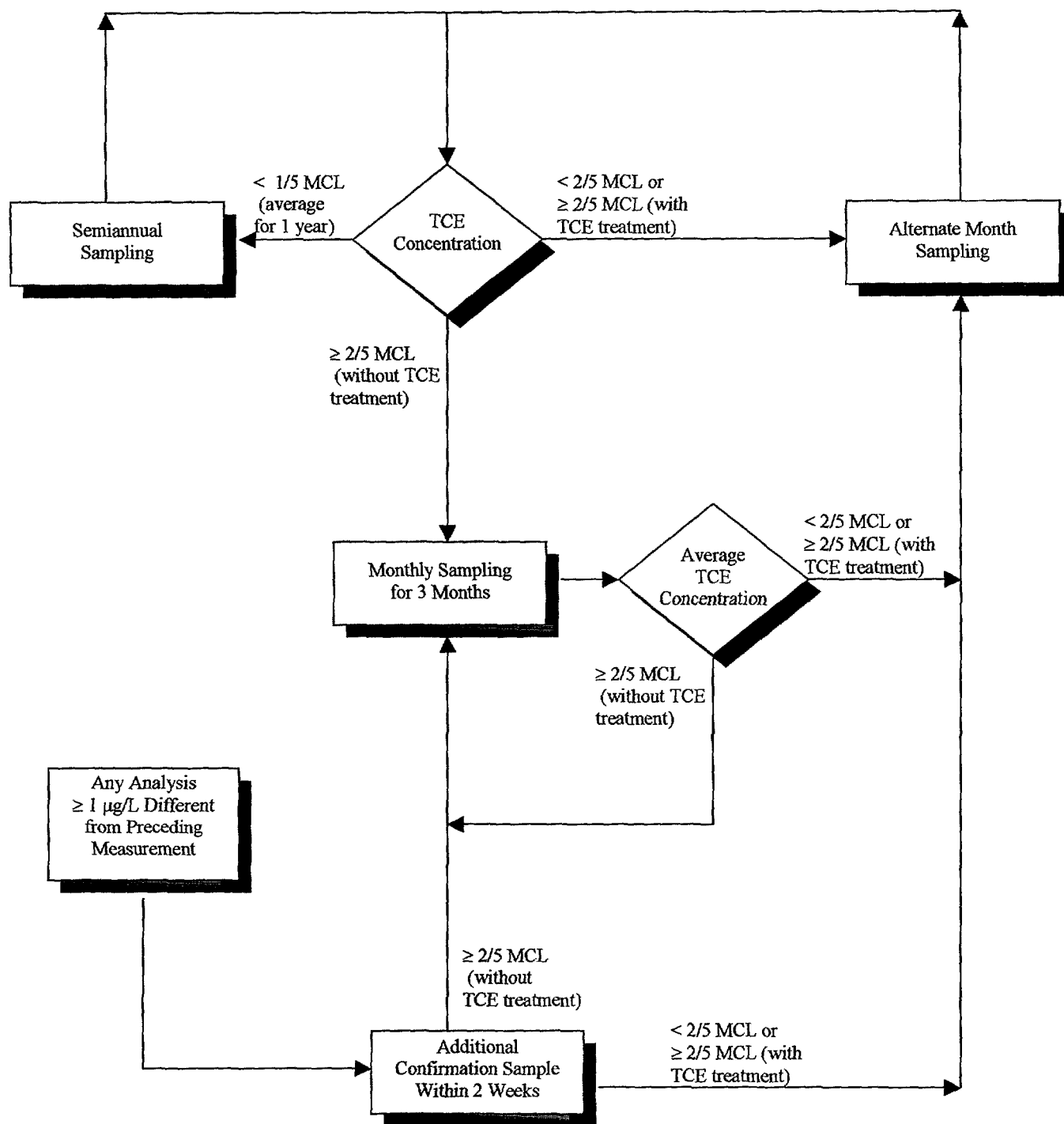
Approximate Bunker Hill Basin Boundary

TITLE: PERCHLORATE DATA RESULTS MAY 2004 WSCP PRODUCTION WELL SAMPLING PROGRAM	
LOCATION: LOCKHEED MARTIN CORPORATION REDLANDS, CALIFORNIA	
CHECKED: Roy Marroquin	FIGURE: 2
DRAFTED: Denver Martin	
PROJ.: 0507.071	
DATE: 6/7/04	



TETRA TECH INC

17770 CARTWRIGHT RD SUITE 500, IRVINE, CALIFORNIA 92614



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of TCE is less than 5 µg/L.

TCE Maximum Contaminant Level (MCL) = 5 µg/L (California Regulations, Title 22, Division 4,

DECISION MATRIX FOR SAMPLING PRODUCTION WELLS FOR TCE

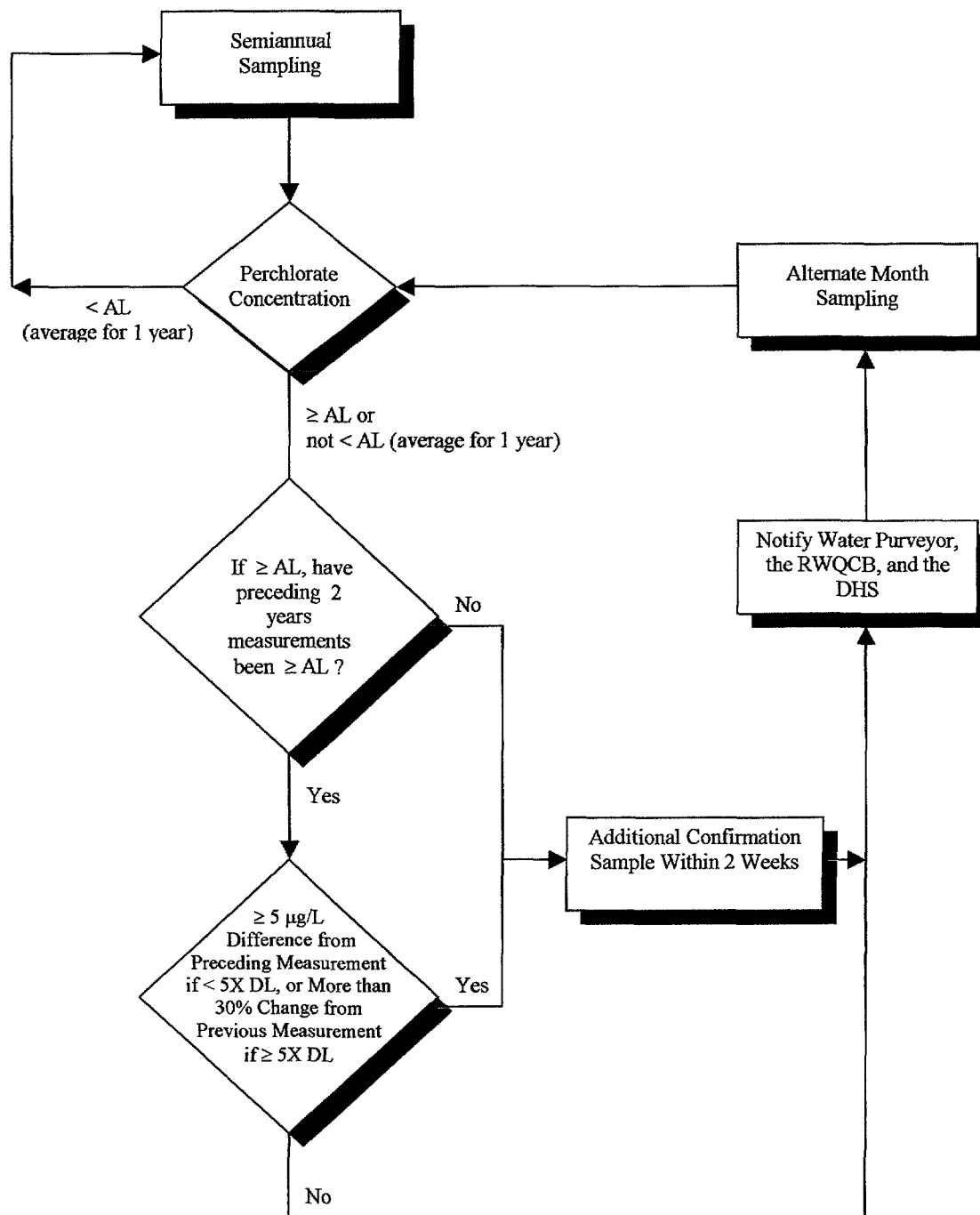
LOCKHEED MARTIN



TETRA TECH, INC.
17770 CARTWRIGHT RD. SUITE 500
IRVINE, CA 92614

DATE:	5/11/04
PROJ:	0507 071 01

Figure 3



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of perchlorate is less than 6 µg/L.

Perchlorate Action Level (AL) = 6 µg/L (California Department of Health Services, March 2004)

DECISION MATRIX FOR SAMPLING PRODUCTION WELLS FOR PERCHLORATE

LOCKHEED MARTIN



TETRA TECH, INC.
17770 CARTWRIGHT RD. SUITE 500
IRVINE, CA 92614

DATE: 5/11/04

PROJ.: 0507.071.01

Figure 4

ATTACHMENT A

WATER SAMPLING FIELD FORMS

Available Upon Request

ATTACHMENT B

LABORATORY REPORT AND CHAIN-OF-CUSTODY

Available Upon Request

Lockheed Martin Corporation
Corporate Energy, Environment, Safety & Health
2550 North Hollywood Way, Suite 301
Burbank, CA 91505
Facsimile 818-847-0256



June 28, 2004

Via Federal Express
BUR0504/098 WBS#48

Mr. Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

**RE: May 2004 Production Well Sampling Report,
Crafton-Redlands Plume Project
RWQCB Cleanup and Abatement Orders 94-37 and 97-58**

Dear Mr. Thibeault:

In accordance with the approved Water Supply Contingency Plan, enclosed is one copy of the May 2004 production well sampling report prepared by Tetra Tech for Lockheed Martin Corporation. This report presents results from samples collected at Bunker Hill Basin production wells in May 2004.

Should you have any questions or comments, please contact Bob Simpson at 818-847-0584.

Sincerely,

A handwritten signature in cursive script that reads "Bill Bath".

Bill Bath
Technical Project Manager

TB:bb

Attachment

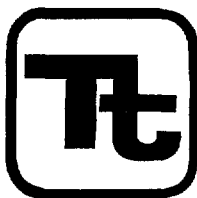
c: See Distribution List

Distribution List

(Abbreviated Report without Attachments "A" & "B," which are available upon request)

Department of Health Services (San Bernardino)
William Bryden, City of San Bernardino
Tom Crowley, San Bernardino Valley Water Conservation District
Douglas Headrick, City of Redlands
Don Hough, Riverside Highland Water Company
Ross Lewis, Gage Canal Company
Owen Lu, City of Riverside
Steve Mains, Western Municipal Water District
Dana Beaman, Loma Linda University
Phil Mook, Department of the Air Force, AFBCA
Kevin Mayer, US EPA (Region IX)
Cindy Norried, City of Riverside
Bob Reiter, San Bernardino Valley Municipal Water District
Steve Williams, Department of Health Services (San Diego)
Alain Sharp, Earth Technology Corporation
Greg Snyder, City of Loma Linda
Ron Hoover, Mountain View Power Company
Dieter Wirtzfeld, City of Riverside

2036708



TETRA TECH, INC.

17770 Cartwright Road, Suite 500
Irvine, CA 92614
Telephone (949) 253-2958
FAX (949) 250-6776

July 27, 2004

Lockheed Martin Corporation
West Coast Project Office
2550 N. Hollywood Way, 3rd Floor
Burbank, California 91505

Attention: Mr. Robert Simpson
Project Supervisor

Subject: June 2004 Data Report
Water Supply Contingency Plan
Production Well Sampling Program
Crafton-Redlands Plume Project

Dear Mr. Simpson:

This report presents a summary of the results of the Water Supply Contingency Plan (WSCP) sampling for the month of June 2004. The Water Supply Contingency Plan (WSCP) was prepared by Lockheed Martin Corporation and submitted to the State of California Regional Water Quality Control Board (RWQCB) Santa Ana Region on September 30, 1996. The current WSCP Sampling Schedule was submitted to the RWQCB on April 24, 2002 and was subsequently approved.

In accordance with the approved WSCP Sampling Schedule, WSCP wells and sample points are sampled monthly, on alternate months or semiannually depending on the sample concentrations and concentration trends in the wells. Wells not sampled during the June 2004 sampling event were either not scheduled for sampling or were not in service during the sampling event.

The locations of the WSCP wells are shown on Figures 1 and 2. The WSCP sampling frequency was provided in the approved WSCP Sampling Schedule submitted to the RWQCB on April 24, 2002 and modified in accordance with the WSCP trichloroethene (TCE) and perchlorate decision matrices, provided as Figures 3 and 4, respectively.

RESULTS

A summary of the analytical results for the June 2004 WSCP sampling event for TCE and perchlorate is shown on Figures 1 and 2, respectively, and presented on Table 1. Available groundwater elevation data collected by local purveyors are provided on Table 2.

The water sampling field forms are provided in Attachment A. Chain-of-custody, laboratory data sheets, and Level III laboratory quality assurance/quality control (QA/QC) documentation are provided in Attachment B.

Trichloroethene

One sample collected in the June WSCP sampling event met or exceeded 2/5th the MCL for TCE (i.e., greater than or equal to 2.0 micrograms per liter [$\mu\text{g/L}$]) as follows:

Gage 92-1 (2.2 $\mu\text{g/L}$)

In accordance with the WSCP decision matrix (Figure 3), wells at or above 2.0 $\mu\text{g/L}$ for TCE are sampled once a month, if active and not in treatment. Gage 92-1 is in treatment and will continue to be sampled on an alternate month schedule.

Perchlorate

Certain wells where perchlorate was detected at or above the 6.0 $\mu\text{g/L}$ action level (e.g. VA Hospital) are outside of the Crafton-Redlands Plume. Other wells may indicate contamination from multiple sources. A total of 11 samples collected in the June WSCP sampling event contained perchlorate at or above the 6.0 $\mu\text{g/L}$ action level as follows:

Gage 26-1 (7.3 $\mu\text{g/L}$)

Gage 27-1 (9.1 $\mu\text{g/L}$)

Gage 29-1 (8.3 $\mu\text{g/L}$)

Gage 31-1 (9.0 $\mu\text{g/L}$)

Gage 66-1 (17 $\mu\text{g/L}$)

Gage 92-1 (29 $\mu\text{g/L}$)

Hunt #6 (6.4 $\mu\text{g/L}$)

Gage Arlington (8.4 $\mu\text{g/L}$)

COR #31A (58 $\mu\text{g/L}$)

COR New York St (16 $\mu\text{g/L}$)

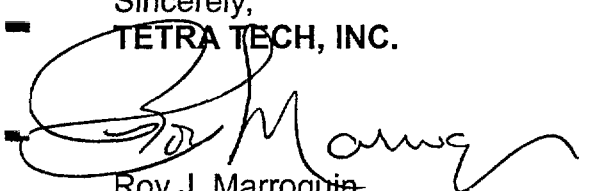
VA Hospital (15 $\mu\text{g/L}$)

No confirmation samples were required in accordance with the WSCP decision matrix for perchlorate (Figure 4) during the month of June 2004.

CLOSING

Tetra Tech appreciates the opportunity to serve Lockheed Martin Corporation on this project. Should you have any questions or comments, please do not hesitate to call.

Sincerely,
TETRA TECH, INC.



Roy J. Marroquin,
Project Manager



James C. Norman, R.G., CHg.,
Program Director

Attachments:

Table 1: June 2004 Data Results
Table 2: Summary of June 2004 Water Level Measurements
Figure 1: TCE Data Results June 2004
Figure 2: Perchlorate Data Results June 2004
Figure 3: TCE Sampling Decision Matrix
Figure 4: Perchlorate Sampling Decision Matrix

TABLES

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
JUNE 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Loma Linda				
3106	Mountain View #3 ^c	NS	NS	NS
3171	Mountain View #4 ^c	NS	NS	NS
3175	Mountain View #5 ^b	NS	NS	NS
693	Richardson #1 ^b	NS	NS	NS
707	Richardson #3 ^c	NS	NS	NS
3132	Richardson #4 ^c	NS	NS	NS
City of Loma Linda Water System Sampling Points				
2967	Mountain View Blend - Lawton ^a	6/1/2004	ND (4.0)	ND(0.5)
2968	Richardson Blend ^a	6/1/2004	ND (4.0)	ND(0.5)
Mountain View Power				
554	SCE #2 (AUX) ^c	NS	NS	NS
Loma Linda University				
267	LL Univ Anderson #2 ^{be}	NS	NS	NR
717	LL Univ Anderson #3 ^{be}	NS	NS	NR
City of Riverside (Gage System)				
252	Gage 26-1 ^{bde}	6/1/2004	7.3	1.8
258	Gage 27-1 ^{bde}	6/1/2004	9.1	NS
259	Gage 27-2 ^b	NS	NS	NS
260	Gage 29-1 ^b	6/1/2004	8.3	NS
219	Gage 29-2 ^{bde}	NS	NS	NS
220	Gage 29-3 ^{bde}	NS	NS	NS
218	Gage 30-1 ^c	NS	NS	NS
214	Gage 31-1 ^b	6/1/2004	9.0	NS
215	Gage 46-1 ^{be}	NS	NS	NS
253	Gage 51-1 ^{bde}	NS	NS	NS
216	Gage 56-1 ^c	NS	NS	NS
257	Gage 66-1 ^{af}	6/1/2004	17	NS
257	Gage 66-1 ^{af} (Duplicate)	6/1/2004	17	NS
644	Gage 92-1 ^{bde}	6/1/2004	29	2.2
641	Gage 92-2 ^c	NS	NS	NS
642	Gage 92-3 ^c	NS	NS	NS
3091	Gage 98-1 ^c	NS	NS	NS
City of Riverside (Waterman System)				
273	Hunt #6 ^b	6/1/2004	6.4	NR
271	Hunt #10 ^b	6/1/2004	5.1	NR
272	Hunt #11 ^b	NS	NS	NR
285	Garner #1 ^b	NS	NS	NR
286	Garner #2 ^b	NS	NS	NR
284	Garner #5 ^b	NS	NS	NR
1908	Garner #6 ^b	NS	NS	NR
2576	Garner #7 ^b	NS	NS	NR
254	Raub #2 ^b	NS	NS	NR
224	Raub #3 ^b	NS	NS	NR
255	Raub #4 ^b	NS	NS	NR
222	Raub #5 ^b	NS	NS	NR
666	Raub #6 ^b	NS	NS	NR
665	Raub #8 ^b	NS	NS	NR
202	Scheuer ^b	NS	NS	NR
282	Stiles ^b	NS	NS	NR
249	Warren #1 ^b	6/14/2004	5.8	NR
247	Warren #4 ^b	6/14/2004	ND (4.0)	NR

TABLE 1

**WSCP PRODUCTION WELL SAMPLING PROGRAM
JUNE 2004 DATA RESULTS**

Well Number	Well Name	Sample Date	Perchlorate (ug/L) Del Mar	TCE (ug/L) Del Mar
City of Riverside Water System Sampling Points				
2946	Iowa Booster ^a	6/1/2004	5.1	ND(0.5)
2946	Iowa Booster ^a (Duplicate)	6/1/2004	5.0	ND(0.5)
2947	Gage Delivery ^a	6/1/2004	4.9	ND(0.5)
2948	7th & Chicago ^a	6/1/2004	4.6	ND(0.5)
3018	Gage Arlington ^a	6/1/2004	8.4	NR
City of Redlands				
542	COR Church St ^b	NS	NS	NR
29	COR Orange St ^c	NS	NS	NR
74	COR Rees ^b	NS	NS	NS
1029	COR Mission ^b	NS	NS	NR
65	COR #31A ^b	6/1/2004	58	NR
265	COR #34 ^b	NS	NS	NR
71	COR #35 ^b	NS	NS	NR
75	COR #37 ^b	NS	NS	NR
2673	COR #38 ^c	NS	NS	NR
Riverside Highlands Water Company				
1354	RHWC #2 ^b	NS	NS	NR
1361	RHWC #5 ^b	NS	NS	NR
383	RHWC #18 ^b	NS	NS	NR
Other Wells - Agricultural				
82	COR New York St ^b	6/1/2004	16	NR
81	COR #41 ^b	NS	NS	NR
3174	VA Hospital ^b	6/1/2004	15	NR

Notes:

ND(4) = Not detected at the specified limit

NR = Not Required Analysis

NS = Not Sampled

TCE = Trichloroethene

Perchlorate analyzed using EPA Method 314.0

TCE analyzed using EPA Method 502.2

Duplicate Samples Identified in Laboratory Reports Using the Well Number

COR #31A does not pump in to the potable system

a = Well/sample point sampled on monthly basis, if active

b = Well sampled once every two months, if active

c = Well sampled on Semiannual basis, if active

d = TCE treatment is installed

e = Perchlorate treatment is installed

f = Perchlorate treatment - reserve

TABLE 2

**SUMMARY OF WATER LEVEL MEASUREMENTS
JUNE 2004 SAMPLING EVENT**

Well Number	Well Name	Measure Date	Depth to Water	Measuring Point Elevation	Groundwater Elevation	Comments
City of Loma Linda						
3106	Mountain View #3	6/7/2004	199.00	1086	887.00	Pumping
3171	Mountain View #4	NM	NM	1106	NM	NM
3175	Mountain View #5	6/7/2004	204.00	1085	881	Pumping
693	Richardson #1	NM	NM	1077	NM	NM
707	Richardson #3	6/7/2004	260.00	1078.7	818.7	Pumping
3132	Richardson #4	6/7/2004	236.00	1074	838	Pumping
Mountain View Power						
554	SCE #2 (AUX)	NM	NM	1100	NM	NM
Loma Linda University						
267	LL Univ Anderson #2	NM	NM	1075	NM	NM
717	LL Univ Anderson #3	NM	NM	1070	NM	NM
City of Riverside (Gage System)						
252	Gage 26-1	6/1/2004	124.20	1045.33	921.13	Pumping
258	Gage 27-1	6/1/2004	125.30	1044.64	919.34	Pumping
259	Gage 27-2	6/1/2004	117.80	1044.64	926.84	Pumping
260	Gage 29-1	6/1/2004	110.60	1044.43	933.83	Pumping
219	Gage 29-2	6/1/2004	121.40	1046.31	924.91	Pumping
220	Gage 29-3	6/1/2004	139.00	1048.75	909.75	Pumping
218	Gage 30-1	6/1/2004	207.00	1054.17	847.17	Pumping
214	Gage 31-1	6/1/2004	154.60	1054.64	900.04	Pumping
215	Gage 46-1	6/1/2004	178.50	1065.5	887	Pumping
253	Gage 51-1	6/1/2004	134.90	1044.64	909.74	Static
216	Gage 56-1	6/1/2004	189.00	1065.5	876.5	Static
257	Gage 66-1	6/1/2004	153.20	1044.85	891.65	Pumping
644	Gage 92-1	6/1/2004	207.60	1047.78	840.18	Pumping
641	Gage 92-2	6/1/2004	205.70	1053.38	847.68	Pumping
642	Gage 92-3	6/1/2004	238.20	1058.78	820.58	Pumping
3091	Gage 98-1	6/1/2004	214.90	1058.78	843.88	Pumping
City of Riverside (Waterman System)						
273	Hunt #6	NM	NM	1015.5	NM	NM
271	Hunt #10	NM	NM	1017	NM	NM
272	Hunt #11	NM	NM	1015.7	NM	NM
City of Redlands						
542	COR Church St	6/1/2004	NM	1344.8	NM	NM
29	COR Orange St	6/1/2004	163.0	1282	1119	Pumping
74	COR Rees	6/1/2004	287.0	1490	1203	Static
1029	COR Mission	6/1/2004	162.0	1130	968	Static
82	COR New York St	6/1/2004	NM	1300	NM	NM
65	COR #31A	6/1/2004	192.0	1319	1127	Static
265	COR #34	6/1/2004	156.0	1090	934	Static
71	COR #35	6/1/2004	238.0	1395	1157	Static
75	COR #37	6/1/2004	214.0	1435	1221	Static
2673	COR #38	6/1/2004	NM	1220	NM	NM
81	COR #41	6/1/2004	NM	1312	NM	NM

Notes:

All measurements reported in feet below measuring point (ft-bmp)

Water level measurements for all City of Loma Linda, City of Riverside, and City of Redlands wells were obtained by purveyor personnel.

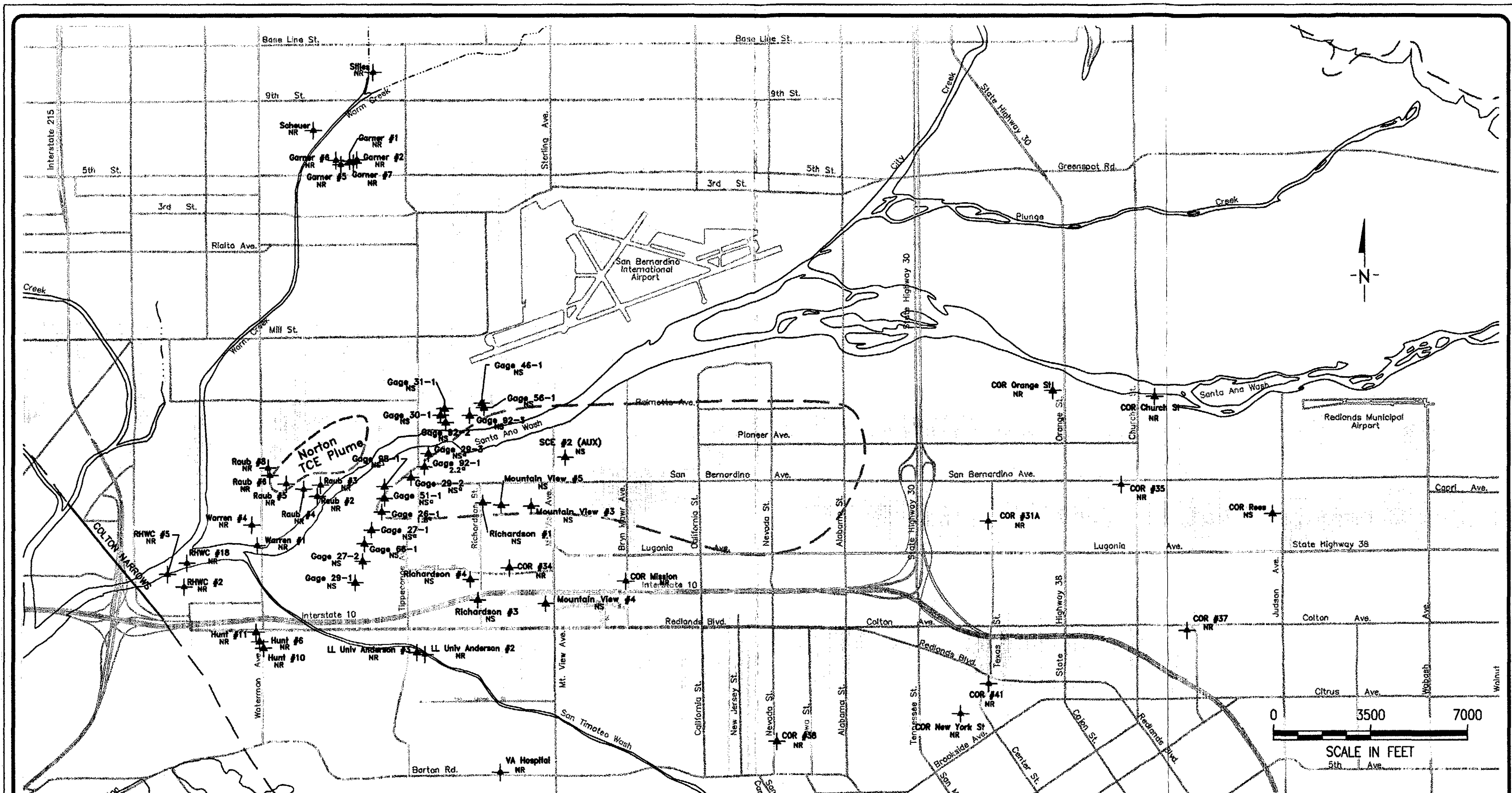
Elevations given in feet above mean sea level (ft-msl)

NM = Not measured

NA = Data not available

Static water levels were allowed to recover a minimum of 30 minutes to obtain a static water level measurement

FIGURES



EXPLANATION

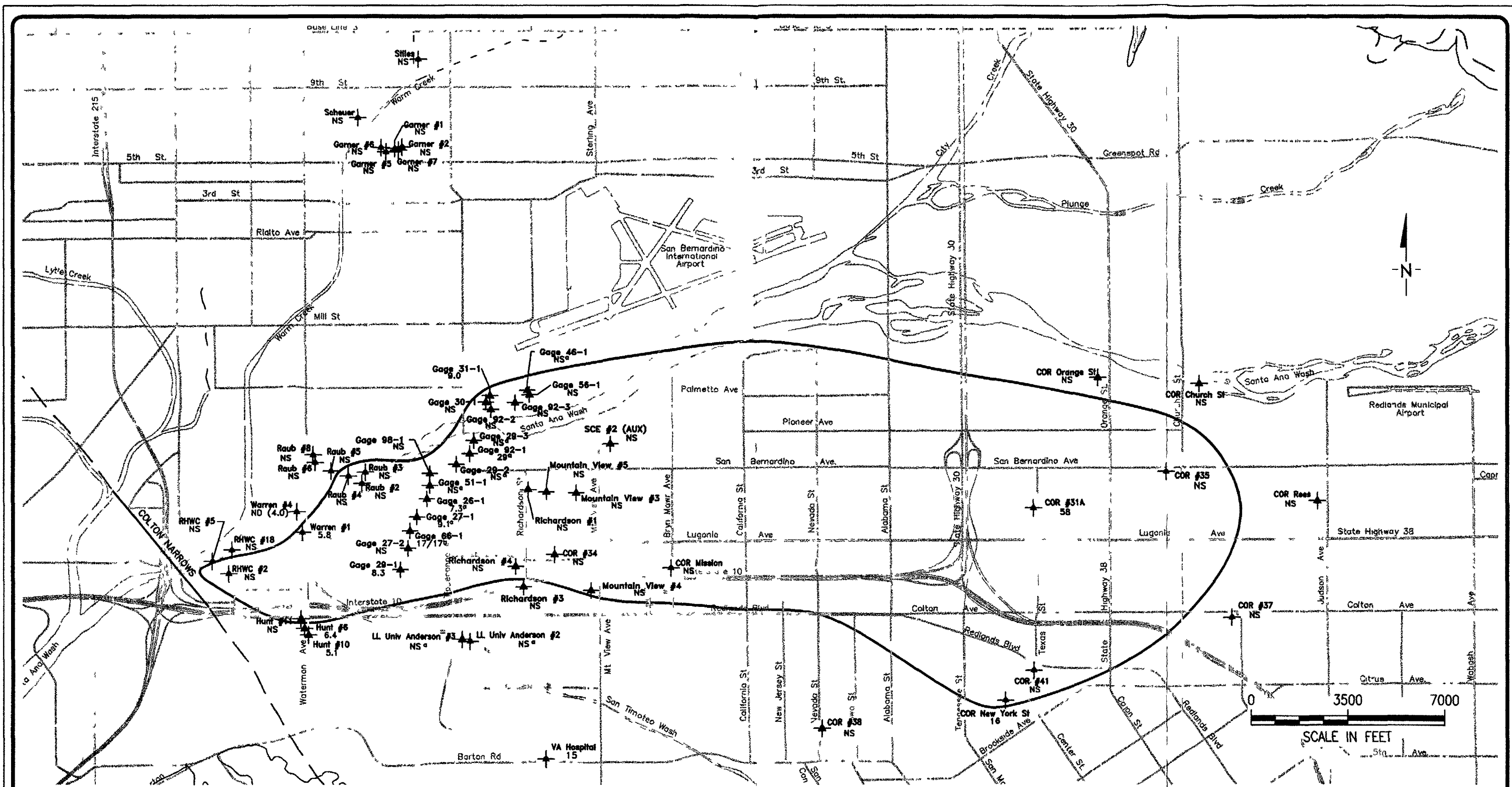
- ★ Wells currently sampled under the existing WSCP Sampling Program
- 3.2 TCE results (µg/L)
- a TCE treatment is installed
- ND(0.5) Not detected at Indicated Detection Limit
- NS Not Sampled
- NR Not Required
- * Confirmation Sample

Blending Point Sampling Data

- ND (0.5) Mountain View Blend - Lawton
- ND (0.5) Richardson Blend
- ND (0.5)/ND (0.5) Iowa Booster (Waterman)
- ND (0.5) Gage Delivery (Gage)
- ND (0.5) 7th & Chicago (Reservoir)
- NR Gage Arlington

- TCE Plume footprint (5 µg/L) (February 2004 Interpretation)
- Approximate Bunker Hill Basin Boundary

TITLE: WSCP PRODUCTION WELL SAMPLING PROGRAM TCE DATA RESULTS JUNE 2004		
LOCATION: LOCKHEED MARTIN CORPORATION REDLANDS, CALIFORNIA		
TETRA TECH INC <small>17770 CARTWRIGHT RD., SUITE 500, IRVINE, CALIFORNIA 92614</small>	CHECKED: Roy Marraquin	FIGURE: <div style="font-size: 2em; font-weight: bold; margin-top: 10px;">1</div>
	DRAFTED: Denver Martin	
	PROJ.: 0507.071	
	DATE: 7/7/04	



EXPLANATION


- ★ Wells currently sampled under the existing WSCP Sampling Program
- 46 Perchlorate results (µg/L)
- ND(4.0) Not detected at Indicated Detection Limit
- a Perchlorate treatment is installed
- b Perchlorate treatment - reserve
- NS Not Sampled
- NR Not Required
- * Confirmation Sample

Blending Point Sampling Data

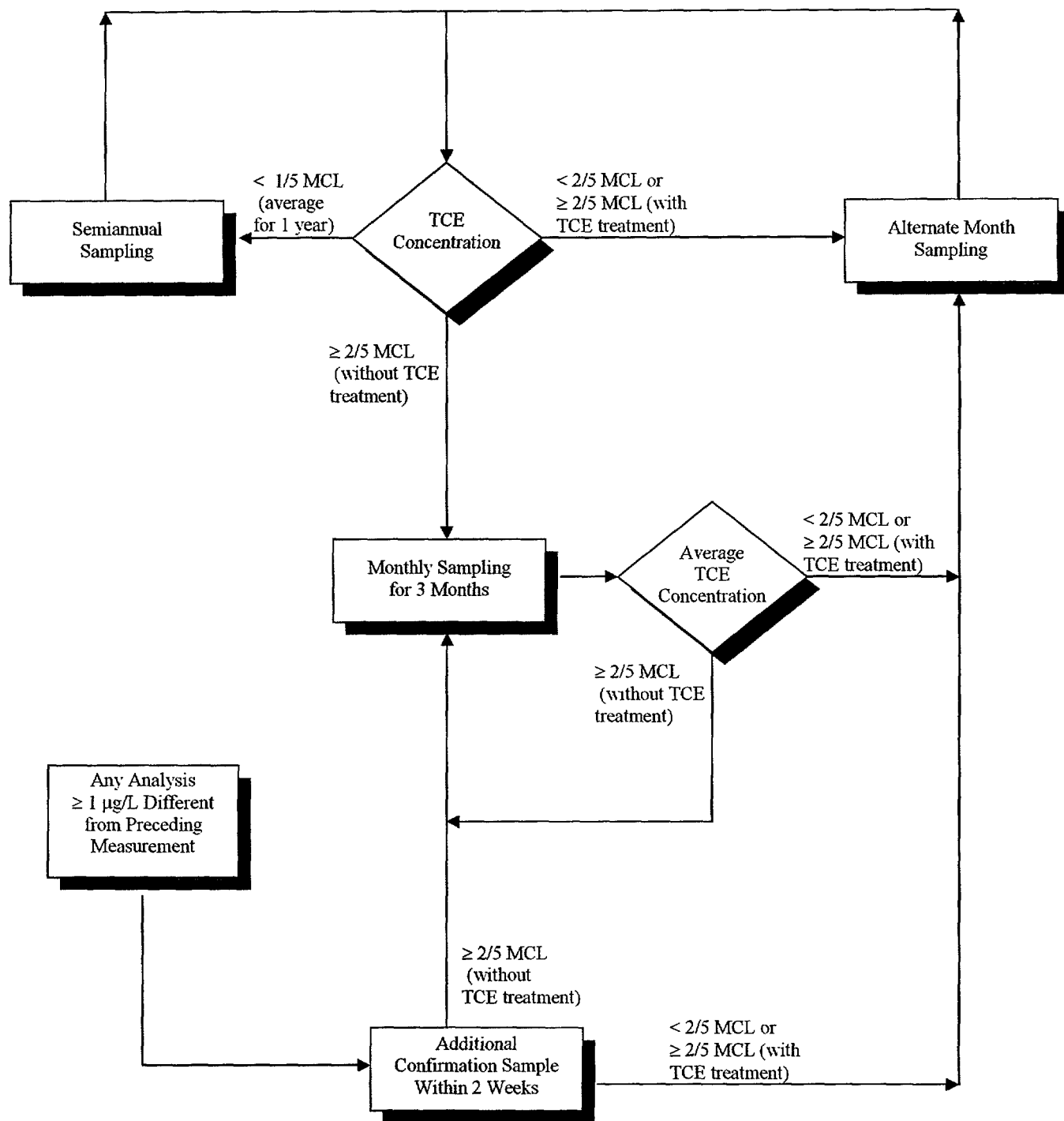
ND (4.0)	Mountain View Blend - Lawton
ND (4.0)	Richardson Blend
5.1/5.0	Iowa Booster (Waterman)
4.9	Gage Delivery (Gage)
4.6	7th & Chicago (Reservoir)
8.4	Gage Arlington

Perchlorate Plume footprint (6 µg/L)
(February 2004 Interpretation)

Approximate Bunker Hill Basin Boundary

TITLE: PERCHLORATE DATA RESULTS JUNE 2004 WSCP PRODUCTION WELL SAMPLING PROGRAM	
LOCATION: LOCKHEED MARTIN CORPORATION REDLANDS, CALIFORNIA	
 TETRA TECH INC 17770 CARTWRIGHT RD, SUITE 500, IRVINE, CALIFORNIA 92614	CHECKED: Roy Marroquin DRAFTED: Denver Martin PROJ.: 0507 071 DATE: 7/7/04
	FIGURE
	2

M:\Redlands\0507071\June04-Fig2.dwg



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of TCE is less than 5 µg/L.

TCE Maximum Contaminant Level (MCL) = 5 µg/L (California Regulations, Title 22, Division 4,

DECISION MATRIX FOR SAMPLING PRODUCTION WELLS FOR TCE

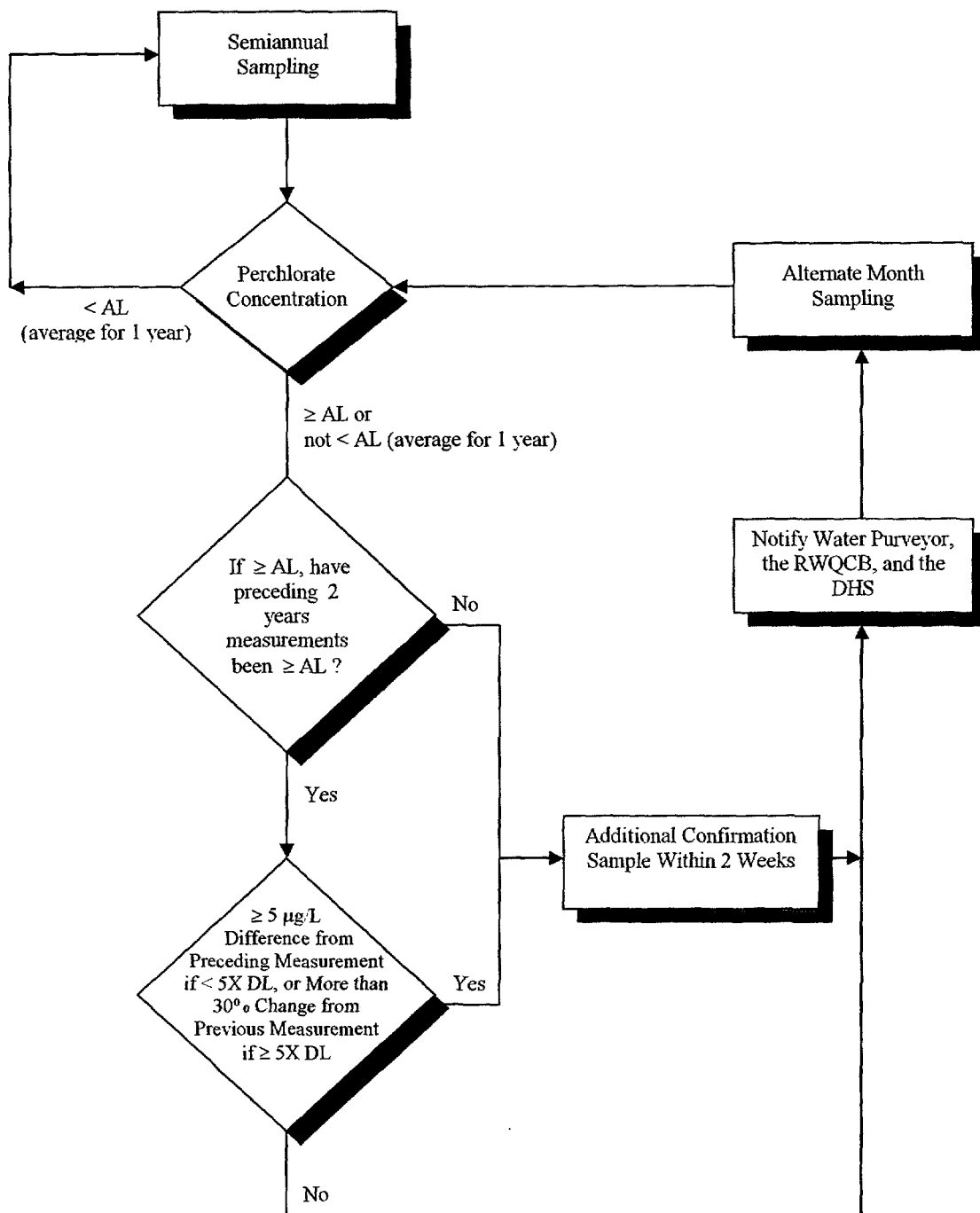
LOCKHEED MARTIN



TETRA TECH, INC.
17770 CARTWRIGHT RD. SUITE 500
IRVINE, CA 92614

DATE:	5/11/04
PROJ	0507 071 01

Figure 3



Footnote:

Blending points for finished water will be monitored monthly to ensure the concentration of perchlorate is less than 6 µg/L.

Perchlorate Action Level (AL) = 6 µg/L (California Department of Health Services, March 2004)

**DECISION MATRIX FOR SAMPLING
PRODUCTION WELLS FOR PERCHLORATE**

LOCKHEED MARTIN



TETRA TECH, INC.
17770 CARTWRIGHT RD. SUITE 500
IRVINE, CA 92614

DATE:	5/11/04
PROJ:	0507.071.01

Figure 4

ATTACHMENT A
WATER SAMPLING FIELD FORMS

Available Upon Request

ATTACHMENT B

LABORATORY REPORT AND CHAIN-OF-CUSTODY

Available Upon Request

Lockheed Martin Corporation
Corporate Energy, Environment, Safety & Health
2550 North Hollywood Way, Suite 301
Burbank, CA 91505
Facsimile 818-847-0256



July 28, 2004

Via Federal Express
BUR142/0704 WBS#48

Mr. Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

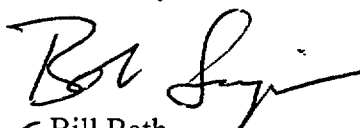
**RE: June 2004 Production Well Sampling Report,
Crafton-Redlands Plume Project
RWQCB Cleanup and Abatement Orders 94-37 and 97-58**

Dear Mr. Thibeault:

In accordance with the approved Water Supply Contingency Plan, enclosed is one copy of the June 2004 production well sampling report prepared by Tetra Tech for Lockheed Martin Corporation. This report presents results from samples collected at Bunker Hill Basin production wells in May 2004.

Should you have any questions or comments, please contact Bob Simpson at 818-847-0584.

Sincerely,


for Bill Bath
Technical Project Manager

TB:bb

Attachment

c: See Distribution List

Distribution List

(Abbreviated Report without Attachments "A" & "B," which are available upon request)

Department of Health Services (San Bernardino)
Dana Beaman, Loma Linda University
William Bryden, City of San Bernardino
Tom Crowley, San Bernardino Valley Water Conservation District
Eric Fraser, City of Colton
Douglas Headrick, City of Redlands
Ron Hoover, Mountain View Power Company
Don Hough, Riverside Highland Water Company
Ross Lewis, Gage Canal Company
Owen Lu, City of Riverside
Steve Mains, Western Municipal Water District
Kevin Mayer, US EPA (Region IX)
Phil Mook, Department of the Air Force, AFBCA
Cindy Norried, City of Riverside
Bob Reiter, San Bernardino Valley Municipal Water District
Alain Sharp, Earth Technology Corporation
Greg Snyder, City of Loma Linda
Steve Williams, Department of Health Services (San Diego)
Dieter Wirtzfeld, City of Riverside